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December 17, 2024

Ms. Vanessa A. Countryman
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

Via Electronic Submission

Re: Financial Data Transparency Act Joint Data Standards Under the Financial Data Transparency Act of 2022
File No. S7-2024-05

Dear Ms. Countryman:

Introduction

Bloomberg L.P.[1] ("Bloomberg") appreciates the opportunity to provide further material background, context and data to the above-referenced proposed rule issued by nine federal agencies.[2] Bloomberg supports the Agencies' efforts on standardization to ensure that the Agencies' data management practices align with the federal government's existing government-wide open data policy.[3] Bloomberg concurs with the informed opinion of the data management and reporting experts[4] at the Agencies who recommended the Financial Instrument Global

[1] Bloomberg L.P. is a global leader in business and financial information, delivering trusted data, news, and insights that bring transparency, efficiency, and fairness to the markets. The company helps connect influential communities across the global financial system via reliable technology solutions that enable our customers to make more informed decisions and foster better collaboration.

[2] *See* Financial Data Transparency Act Joint Data Standards, 89 FR 67890 (August 22, 2024), *available at* https://www.federalregister.gov/documents/2024/08/22/2024-18415/financial-data-transparency-act-joint-datastandards (the "Proposal"). The Office of the Comptroller of the Currency ("OCC"), the Board of Governors of the Federal Reserve System ("Federal Reserve Board"), 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 ("Treasury") jointly participated in the rulemaking (collectively the "Agencies").

[3] *See e.g.*, Open Government Data Act, Public Law No. 115-435 (Jan. 14, 2019).

[4] *See* ("Proposal") Proposed Rules, "Financial Data Transparency Act Joint Data Standards", 89 FR 163, (August 22, 2024), "FOR FURTHER INFORMATION CONTACT", at 67893, *available at* https://www.govinfo.gov/content/pkg/FR-2024-08-22/pdf/2024-18415.pdf. The data science experts included: OCC:

Identifier ("FIGI") to be the government's standard for financial instrument identification for purposes of reporting to the Agencies.

The Overarching Goal is Data Management to Support Oversight.

The goal of the Financial Data Transparency Act ("FDTA") is for the Agencies to promote interoperability of financial regulatory data across the Agencies to support each Agency's individual and the Financial Stability Oversight Council's ("FSOC") regulatory oversight mission. Congress, based on the experience from the implementation of the preceding open government data acts, directed the Agencies to define a unified data model (e.g., interoperability)[5] based on a set of joint data standards.

In response to Commissioner Peirce's question: "Does the FDTA's statutory mandate extend to financial instruments?"[6] Bloomberg believes that the answer is clearly yes. The Government's efforts in the Data Act as well as the legislative history of the FDTA, which was originally entitled the "Making All Data Open for Financial Transparency (MADOFF) Act," necessarily point to a joint standard for financial instruments as the most practical way Agencies' data can become interoperable in accordance with the Act.[7] As we noted in our prior letter, while the FDTA does not explicitly mention "securities level identifiers," it actually contains broader language that directs the Agencies to select a set of 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…" [8] As financial identifiers are currently collected by the Agencies and included within "collections of information" as the term is defined in the Proposal as well as under the Paperwork Reduction Act of 1995,[9] it is clearly within scope of the FDTA's mandate. This interpretation of the FDTA's scope is entirely consistent with the Agencies' Proposal.

In addition, and as previously noted, the FDTA provides a lengthy list of characteristics that all common identifiers must possess. These characteristics are in addition to those specifically required for the legal entity identifier. In fact, there is an entire section of the FDTA that specifies the characteristics that the Agencies should consider in selecting common

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Richard Heeman, Enterprise Data Governance Program Manager, Office of the Chief Information Officer and Chief Data Officer; Board: Katherine Tom, Chief Data Officer; FDIC: Geoffrey Nieboer, Chief Data Officer; NCUA: Office of Business Innovation: Amber Gravius, Chief Data Officer; CFPB: George Karithanom, Office of Regulations; FHFA: Matthew Greene, Office of the Chief Data Officer; CFTC: Ted Kaouk, Chief Data Officer; SEC: Parth Venkat, Office of the Chief Data Officer; Treasury: Cornelius Crowley, Chief Data Officer.

[5] *See* Proposal at 67891.

[6] *See* Commissioner Hester M. Peirce, Statement, "Data Beta: Statement on Financial Data Transparency Act Joint Data Standards Proposal", (August 2, 2024) *available at* https://www.sec.gov/newsroom/speeches-statements/peirce-statement-financial-data-transparency-act-080224.

[7] *See e.g.* ("Bloomberg Letter"), letter from Bloomberg L.P., (October 21, 2024), "Legislative History of the FDTA", at 10-12, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-533215-1528962.pdf.

[8] 15 U.S.C. 5334(c)(1).

[9] 44 U.S.C. 3501 *et seq*. The term "collection of information," is defined at 44 U.S.C. 3502(3).

identifiers other than the legal entity identifier.[10] This section would be rendered meaningless if the only identifier the Agencies were permitted to select was a legal entity identifier.

The FDTA mandates the Agencies implement the Act in ***two-stages*** – the overarching purpose of Phase I – this current joint rulemaking – is to identify standards that will promote interoperability of financial data across the Agencies.[11] After careful deliberation, FIGI was selected as the joint standard for financial securities.

FIGI is particularly useful for the Agencies in achieving the goals of better data management and interoperability as it is a data model, while CUSIP is simply an identifier. And there is a clear difference between the two. An identifier recognizes a security "now" – at this point in time, and as a single basic concept without any relationships to a use case. A data model, on the other hand, preserves a security's historical lineage through a time series, provides specific context by use case such as econometric and statistical analysis, as well as offering metadata that describes the relationships between data points. The adoption of a data model is transformative. It will enable the Agencies to draw upon each Agency's interoperable data. And, if security identifiers are based on open-source standards, it will (1) optimize the Government's data purchasing power by enabling the Agencies to buy only the data that they need rather than licensing a data package with extraneous information just to use a mandated identifier and (2) expand the public's use of the data by eliminating the public's need to also purchase a license only to use a mandated identifier.

The Act does not direct the Agencies to replace incumbent identifiers with the joint standards - it requires the Agencies in Phase II, under the Administrative Procedure Act, to apply the joint standards, to the extent feasible, to the Agency's existing collections of information. In discharging these requirements, the Agencies are afforded a certain amount of flexibility and discretion by the FDTA to, among other things, determine the applicability of the joint standard to the particular collection of information, scale data reporting requirements to reduce any unjustified burden on smaller entities, and minimize disruptive changes. [12] Phase I simply provides the Agencies with a starting point – enabling them to develop, describe, document, and begin to build an efficient enterprise data management model. The FDTA is the latest in a series of efforts by Congress directing the Federal government to develop a data, data management, and data transparency strategy. Prior to the FDTA, the Foundations for Evidence-Based Policymaking Act of 2018[13] required federal agencies to establish a Chief Data Officer position at each agency to have a senior leader responsible for assessing data needs and to implement data management strategies, such as selecting appropriate data management standards and planning for the application of developing regulatory technologies.[14] The FDTA is largely a continuation

[10] 12 U.S.C. 5334(c)(1)(B)(i)-(vi).
[11] *See* Proposal at 67891.
[12] *See e.g.*, FDTA sections 5821(a)(2) and 5821(i)(2).
[13] *See* Pub. L. 115-435.
[14] *See Supra* n. 4 for a list of Data Officers at the respective Agencies.

of this broader ongoing effort, and the Proposal indicates that the Agencies have determined that it is in their strategic best interest to begin this "internal" process with the FIGI data model.

It is notable which Agencies and self-regulatory organizations (SROs) are directed to adopt the joint standards and which ones are not. The FDTA only directs ***certain***, not all, SROs to apply the joint standards to their rules. These SROs include Financial Industry Regulatory Authority ("FINRA") and the Municipal Securities Rulemaking Board ("MSRB"). This makes perfect sense from the standpoint that the FDTA is focused on the utility of reported information. FINRA and MSRB regularly collect reports from market participants, share the information, and use the information for surveillance, market intelligence, and public transparency. FINRA's TRACE system in particular demonstrates the criticality of open-source security identifiers and how Agencies and SROs have attempted to mitigate the adverse effects that restrictive licenses have on transparency and interoperability. To expand usability and ensure the public's access to FINRA's published data without having to secure a CUSIP license, FINRA publishes its TRACE historical information for all TRACE reportable asset classes (Corporates, ABS/MBS securitized products, US Treasuries) "in both CUSIP and non-CUSIP versions (for customers without a CUSIP license)."[15] FINRA maintains an open source FINRA-assigned TRACE symbol, in part, to distribute a non-CUSIP file for this purpose.

It is equally notable that the FDTA does not direct certain other SROs, such as the registered clearing agency SROs (e.g., Depository Trust Company, National Securities Clearing Corporation, and Fixed Income Clearing Corporation, collectively DTCC) that facilitate settlement and clearing, to adopt the standards. Those SROs are primarily involved in facilitating market transactions – settlement and clearing – and are not involved in the same way in market surveillance and public transparency. So, they were not included. Several commenters assert that the joint standards, and FIGI in particular, would be disruptive to the market. Bloomberg believes this is a misreading of the statute. Nothing in the FDTA directs any Agency or SRO to adjust settlement and clearing or otherwise adjust private conduct.[16] The identifiers, such as the ISIN, CUSIP, CINS, etc., that are currently accepted by DTCC, will not be impacted by the Proposal. FIGI was developed and approved as an American National Standard for a use case more aligned with the challenge that Congress gave the Agencies – enterprise data management. The X9 Accreditation Committee, which included the ABA and CUSIP in 2021 saw that FIGI created a bridge across multiple identification systems for financial instruments, and its scope, granularity, and persistence makes FIGI a standard complementary to CUSIP and other identifiers. The FIGI is not a challenge to proprietary codes. FIGI is a unifying code that is critical for data management – the Agencies' use case. It pulls together different symbologies consistent with modern best practices about ontologies and hierarchies that provide transparency regarding the context and relationships between security instruments.

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[15] *See* FINRA, "Historic Data Information" *available at* https://www.finra.org/filing-reporting/trace/historic-academic-data; *see also* Bloomberg Letter at 78.

[16] *See* Bloomberg Letter at 19.

FIGI is a Data Model and Not a Piece of Data.

Identifiers are critical data. Data in a vacuum, however, has little utility, as it lacks the context that is necessary for better understanding and utilization. Data always exists in relation to something else. Whether to fit different use cases, or to enable governance when changes to data happens, a data model must have established relationships which enables data managers to (1) clearly see where changes impact other data; (2) clearly apply the descriptive data that is applicable to a use case; and (3) easily determine that the descriptive data may not be applicable to another use case.

Data models provide not only information regarding the individual object (such as a financial instrument), but also the relationships between that object, its descriptive data, and other objects. FIGI, for example (Figure 1), provides a data model representation that links different contextual views in which a financial instrument may exist (such as historical lineage for research, statistical analysis and machine learning applications, assessment of enterprise risk, or trading and settlement), along with the descriptive data that relates to that specific contextual view.

The national numbering agency identifiers, such as CUSIP and ISIN, on the other hand only provide a single flat expression of any financial instrument. In most cases, especially in execution, settlement and clearance, data for other contextual views is neither needed nor present. But that is not the Agencies' use case. The Global Financial Crisis exposed global interconnectivity and (systemic) risk linked across markets. Today, liquidity is fragmented across 16 U.S. equity exchanges. U.S. stocks are also listed, and the risk of those stocks is spread, across multiple markets in different countries and sometimes across multiple venues in those markets. Adopting a securities data model, such as FIGI, provides the Agencies with a multifaceted view of the world, which is essential for studying the financial markets (such as the impact of implemented regulation). By contrast, singular identifiers force a single view of the world and require more effort, additional data, and additional formal model work to better support a more expansive understanding.

An easy way to contrast a data model methodology as opposed to a simple identifier methodology is to look at national numbering systems themselves. In most countries, organizations have set about creating their own unique numbering system, such as CUSIP in the United States, or SEDOL in the UK. However, you cannot use a CUSIP to identify an instrument that exists in the UK or France or Japan. Nor, just using one of these identifiers, will you know which national numbering agency it may be from, or where it applies.

ANSI X9.145-2021

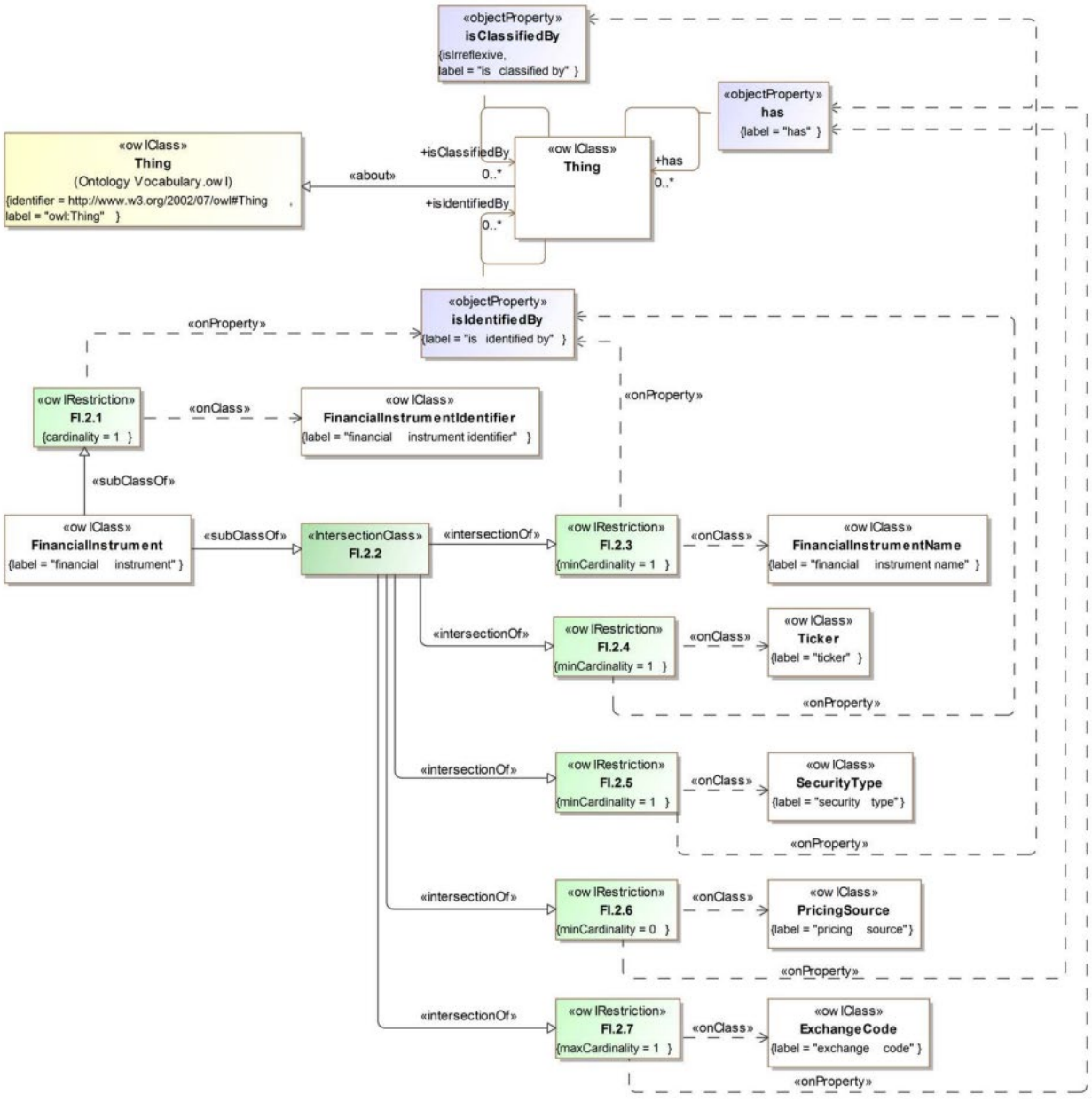

Figure 8.2 - Financial Instruments

Figure 1. FIGI Financial Instruments Data Model [17]

[17] *See* ("ANSI X9 FIGI Standard Approval"), American National Standard for Financial Services ANSI X9.145-2021, Financial Instrument Global Identifier FIGI, Accredited Standards Committee X9, Incorporated, Financial Industry Standards (July 29, 2021), Figure 8.2, at 32, *available at* https://x9.org/wp-content/uploads/2021/08/ANSI-

Some may point to an ISIN number, which incorporates a national number within an international numbering framework, as the solution. However, while the prefix may indicate the country of the issuing national numbering agency (for example "US" prefixes CUSIP-based ISINs, "JP" prefixes Japan's numbering system-based identifiers, etc.), it does not indicate where that instrument actually may be traded or held, what currency may be applicable, and so forth. For example, IBM common stock has one single ISIN, based on one single CUSIP, but that ISIN is the same for IBM traded in GBP in the UK, Euro in France and Germany, and so forth.

In contrast, a data model, such as FIGI, will provide a single identifier for an instrument across all countries globally, as well as different identifiers for various states in which that instrument may be traded, with the relevant data for that instance (whether that is a different instance for each currency/country combination, or a more specific exchange it is traded on). In order to be a complete data model, these instances reference the related objects – so the exchange instance references both the currency/country instance and the simple single stock instance context. This identification system, in total, represents the data model.

Critical to the Agencies' Use Case is a Data Model that Imposes Consistency and Preserves Historical Lineage.

Data management models not only provide structure and context but, as importantly, data management models also stress consistency – across time. The key to consistency is understanding data in context, which only a model driven security identification system will do.

The Agencies collect and extract information from financial statements, prospectuses, official statements, term sheets, disclosure statements, and other issuance documents. In security analysis, identification consistency is essential to spotting potential irregularities in company filings, assess and model market structure risk, stress test, identify persistent and emerging trends, and, as the Global Financial Crisis exposed, contagion risk due to growing global interconnectivity and market linkages. Since the Global Financial Crisis, the demands to organize financial security data have changed significantly. Simple identification is inadequate for the transparency and complex insights that Congress and the public expect the Agencies to provide as part of their oversight mission. Congress formed the FSOC to anticipate problems and work with the Agencies to address emerging risks. The FDTA and the Foundations for Evidence-Based Policymaking Act of 2018 direct the Agencies to establish a data management model that solves for data integration across disparate databases and repositories of data through joint standards to support that work.

Agencies, and especially the FSOC, need to take a global view and rely on a data management model that integrates different data structures, definitions, and contextual meanings across time. FIGI was created, in part, because a new financial security data governance model was needed to embed contextual standards and preserve the historical lineage of a security's

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X9.145-2021-Financial-Instrument-Global-Identifier-FIGI.pdf. Also see Figure 6.1, "Identification by Share Class", at 20, and Section 8, for more diagrams on the FIGI Ontology and data model at 25-40.

data.[18] Unlike other identifiers, as a global data management standard, the FIGI persists globally. An identifier change after a corporate action works for a single "this is the one thing at this point in time" use case (such as execution, settlement and clearance), but it breaks the historical lineage, which is critical for data management. This historical lineage, rather than the point in time approach, is one of the exact features that the Agencies' data management models need to control for and is a weakness of the national numbering agencies' identification systems – because they were not built for this use case. This is what the FIGI standard does.

For example, a listed issuer experiences multiple de-listings and re-listings, undergoes a partial name change during the process, and ultimately is delisted before being purchased by a private fund. In this case, the stock representing the company ownership would have gone through at least 3 or 4 identifier changes (CUSIPs, ISINs, SEDOLs, etc.), such as in the case of WeWork.[19] Yet, in this case, the original FIGI created when the shares were identified would not have changed and remained persistent throughout these corporate changes (Figure 1A). For the Agencies to understand and track ownership throughout these changes, without FIGI, they would need to track the CUSIP changes that occurred over time and somehow associate them together, otherwise it would appear as multiple different investments as opposed to the single investment it truly was.

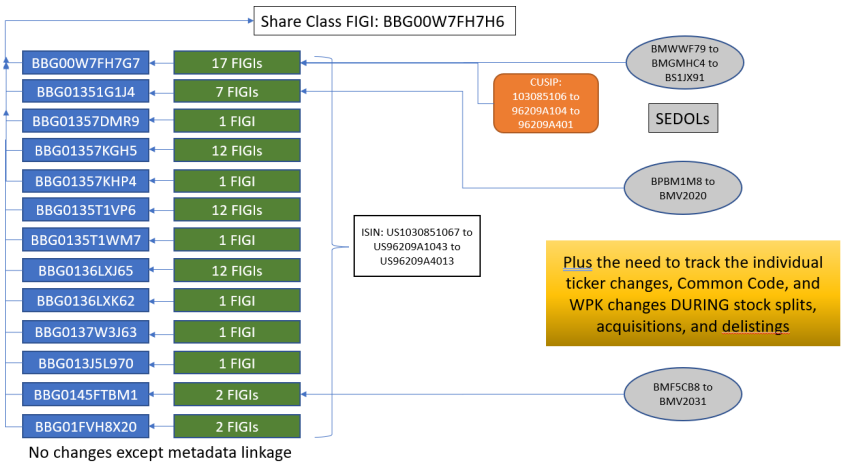

Figure 1A. WeWork's FIGI did not change, preserving historical lineage for analysis.

[18] *See* Bloomberg Letter at 17-18.

[19] For example, between 2020 and 2023, WeWork was in listed 5 different countries; across 4 different currencies (USD, EUR, GBP, MXN); with 66 individual listings (multiple exchanges per country, plus MTFs and OTC); and 30 MTF listings in multiple currencies across 10 MTFs. Additionally, WeWork had 8 tickers, plus 15 previous tickers that changed over time; 3 CUSIP changes, plus 3 related CUSIP changes; 3 ISIN changes; 3 SEDOLs, with 3 related SEDOL changes (9 SEDOLs total); 3 WPK changes; 3 Common Code changes.

History Shows that the FIGI Data Management Model Would Fit the Agencies' Needs.

The Flash Crash of 2010 demonstrates the value of FIGI as a data management model to the SEC and CFTC. Dr. Craig Lewis' research, supported by the American Bankers Association ("ABA") and included as Exhibit 1 in the ABA's submission, observed that, "The FIGI was designed to provide identifiers for multiple different purposes, not just for providing a unique common identifier at the asset level."[20] Dr. Lewis noted that the FIGI equity hierarchy "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 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 Nasdaq Stock Market). Although these different FIGIs ultimately refer to the same security, they refer to the security in a specific context."[21] FIGI's hierarchical structure is a data model innovation that fits today's market structure. In the 1960s when CUSIP was developed, the equity market was not fragmented like it is today, so a hierarchical data model was neither a requirement nor even a thought (Figure 2). However, when Cusip Global Services. ("CGS") launched CUSIP identifiers for Loans, it created a data model – a hierarchical data structure approach in order to associate the deal/facility with its associated individual loans/tranches.

In short, despite the ABA's criticism of FIGI's hierarchical capacity – when coverage of new asset classes afforded CUSIP the opportunity to adapt, the logical decision was made to modify CUSIP from a simple identifier to a data model and function more like FIGI.

1967	
NYSE	64%
AMEX	28%
All other (11) exchanges	7%

2023	
Off-Exchange TRF	42%
NASDAQ	19%
NYSE	11%
NYSE Arca	9%
CBOE BATS	5%
CBOE EDGX	5%
IEX	3%
MEMX	3%
Other (9) exchanges	6%

Figure 2. Annual Shares Traded, Percentage, by Exchange. [22]

[20] Craig M. Lewis, PhD., "Financial Data Transparency Act Joint Data Standards Proposed Rule Making", Exhibit 1, in letter from the American Bankers Association (October 21, 2024), ("ABA Letter"), Paragraph 27, at 75, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-532915-1528742.pdf.

[21] *Id.* at 75-76.

[22] *See* "34th Annual Report, 1968 For Fiscal Year Ended June 30,th" U.S. Securities and Exchange Commission, at 71, *available at* https://www.sec.gov/about/annual_report/1968.pdf and Bloomberg Intelligence.

Dr. Lewis' observation that "[FIGI] 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" describes several current potential data interoperability and data management challenges at the Agencies.[23] Consider, for example, the MIDAS system operated by the Office of Analytics and Research in the SEC's Division of Trading and Markets. MIDAS is "a system that collects and processes data from the consolidated tapes as well as from the *separate proprietary feeds* made individually available by each equity exchange."[24] As Dr. Lewis postulates, in this use case, FIGI is useful in associating and organizing quotations and trade data from each U.S. equity exchange.

This was the exact real-world requirement that the staffs of the CFTC and SEC had to implement to research the events leading to the May 2010 Equity Flash Crash using the granular individual exchange order books for ETFs, common stocks and equity index futures. [25] These real-world use cases demonstrate the importance of the Agencies selecting an appropriate joint security data management identifier standard to organize data and facilitate interoperability and sharing across one or more Agencies in order to generate a true picture of risk across a complicated enterprise. A security data management model is a very different use case and requires very different capabilities than identifying a security to facilitate the private sector's executing, clearing, and settling transactions. FIGI was constructed to satisfy this use case.

Some commenters have lost sight of the fact that this phase of the implementation of the Act *only* concerns interoperability and data sharing[26] – enabling the Agencies and the FSOC to create an internal structure to more efficiently manage their own data and share data with each other in a manner that is consistent, useful, and streamlined to fulfil their research, oversight and stability missions.[27]

In Phase I, the selection of joint standards should not be framed as CUSIP vs FIGI but rather data model capabilities. As an initial matter, FIGI was created specifically as a bridge across multiple identification systems for financial instruments, and over 135 data vendors and third-party service providers demonstrate that FIGI is fungible and mappable to proprietary identifiers, such as CUSIP, CINS and ISIN. Looking ahead to Phase II, it is consistent for the

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[23] ABA Letter at 91.

[24] *See* U.S. Securities and Exchange Commission, "MIDAS: Market Information Data Analytics System – What is MIDAS?", *available at* https://www.sec.gov/securities-topics/market-structure-analytics/midas-market-information-data-analytics-system.

[25] *See* "Findings Regarding the Market Events of May 6, 2010 – Report of the Staffs of the CFTC and SEC to the Joint Advisory Committee on Emerging Regulatory Issues", specifically the methodology to understand the "failure in liquidity" during the event from the interactions between futures prices and movements in the order books at each exchange (e.g., market depth), at 80, *available at* https://www.sec.gov/files/marketevents-report.pdf.

[26] *See* Proposal at 45. The premise/purpose of interoperability was expressed by the FDIC. "The proposed rule, if enacted, would establish data standards for collections of information reported to the Agencies, as mandated by the FDTA. The establishment of these data standards may promote the interoperability of the data and may reduce the costs to transmit or ***share data between and among the Agencies***" (emphasis added).

[27] Id. "These reduced costs may improve the FDIC's ability to plan, coordinate and evaluate future regulatory and supervisory actions."

Agencies to use the joint standards internally and not force adoption of the joint standard on the public. Modern mapping capability makes it easy for the federal government to receive data in a manner that balances its needs with potential costs to the industry.[28] Upon completion of the joint rulemaking, each Agency is separately called upon to individually engage in Agency-specific rulemakings to adopt the applicable data standards for collections of information, to the extent feasible. The Act is very specific that each Agency in Phase II will have to consult with the public and conduct a cost-benefit analysis when applying the joint standards on the public. The Act requires that the Agencies demonstrate that they minimize disruptive changes.[29]

In the "Paperwork Reduction Act" section, each Agency affirmed that this Phase I of the Proposal had no practical impact on the public because it would neither create additional requirements for nor impose burden on private individuals, businesses, organizations, etc., so the Paperwork Reduction Act and cost benefit analysis were not applicable.[30]

In response to Commissioner Peirce's question: "What are the total direct and indirect costs of adopting the contemplated standards?"[31] Bloomberg agrees with the FDTA's two-phase approach where the instances where the Commission believes that FIGI should become part of the regulatory apparatus should be assessed on a case-by-case basis. This is the current approach the Commission appears to be taking in incrementally incorporating use of FIGI adjacent to incumbent identifiers in five rules.[32] Phase II is where the benefits and costs should be assessed, as the Agency will have decisions to make that will potentially impact costs and benefits. Is it optimal for an Agency to provide mapping services? Is it optimal for the Agency to rely upon existing free mapping services?

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[28] *See* Bloomberg Letter, "Mapping to FIGI Is a Viable Means of Data Management", Appendix C, at 66-74, and at 16-17 and at 27, "The fact that OpenFIGI monthly records over 15 billion downloads strongly suggest that FIGI – by itself – suffices for the FDTA's purpose of identifying a financial instrument and is indeed widely used for that purpose. For use cases beyond the identification of a financial instrument, these fields may be supplemented with additional reference data that may be provided by virtually any reference data provider. Over 135 data vendors worldwide include FIGI as a security identifier option. *FIGI is Widely Available, Fit for Purpose as an Identifier of Financial Instruments, and Has Developed a Proven Track Record*."

[29] *See* Bloomberg Letter at 23-24, "The FDTA may provide the Agencies an opportunity to introduce competition through open-source standards and enables market participants an opportunity to choose joint standard usage where it is "feasible" and "applicable" and where it makes sense to do so (e.g., "minimize disrupted changes"). For example, when considering reporting information to an Agency, the FDTA requires an Agency to "determine feasibility of incorporating the joint standards". An Agency, in consultation with the industry and public, may determine that it is advantageous to continue reporting to an Agency using the current (incumbent) proprietary identifier (e.g., CUSIP) with the Agency taking on the responsibility to map the data from the regulatorily entrenched (incumbent) proprietary identifier to the applicable joint standard (e.g., FIGI). Alternatively, an Agency may advocate reporting with the incumbent identifier "and" the joint standard. An Agency may advocate reporting with the incumbent identifier "or" the joint standard. In each case, an Agency proposing any such change under the FDTA would need to conform with the APA and conduct a cost benefit analysis."

[30] *See* Proposal at 67899-67900.

[31] *See* Statement, Commissioner Hester M. Peirce.

[32] *See* Bloomberg Letter at 20.

Bloomberg would like to take this opportunity to address other specific comments and explain how FIGI is best suited as a data management standard.

Response to Comments:

1. **Inaccurate Assertion: FIGI did not develop with industry collaboration. FIGI is not established. FIGI is not used as an identifier.**

While none of these assertions have anything to do with the statutory requirements of the FDTA, the assertions are incorrect.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 recognized that "U.S. financial regulation focused narrowly on individual institutions and markets, which allowed supervisory gaps to grow and regulatory inconsistencies to emerge in turn, allowing arbitrage and weakened standards."[33] In response to the growing interconnectivity of the markets and the need to improve collaboration and data-sharing between the financial regulatory agencies, the FSOC was established.

The FDTA, especially in Phase I, is addressing a very tactical and practical issue – each Agency's data management strategies, collection and use have largely evolved in silos. The Agencies need to develop a data model that supports research, analysis for effective oversight, and future regulatory and supervisory actions in a world where technology is connecting markets across multiple financial regulatory agencies. Market maker strategies reach across these regulatory silos, so the data needs to be interoperable for regulatory oversight to be effective.

The Agencies need to develop a data model that supports research, and analysis of future regulatory and supervisory actions in a world where technology is connecting markets across multiple financial regulatory agencies.

What piece of financial architecture from the 1960s is still in use today? And why?

The answer is "CUSIP" and the primary reason for its industry uptake is the fact that the SEC has been since 1971 mandating the use of CUSIPs. This mandate to use a particular commercial product to satisfy government reporting requirements has – predictably – encouraged high costs and low innovation.[34]

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[33] *See* U.S. Department of the Treasury, "About FSOC", *available at* https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/fsoc/about-fsoc.

[34] *See* Dinosaur Financial Group LLC et al. v. S&P Global, Inc. et al., No. 22-cv-1860(KPF) (S.D.N.Y.), included Letter from Plaintiff's Counsel, Competition Law Partners PLLC, Wollmuth Maher & Deutsch LLP, and Kaplan Fox & Kilsheimer LLP, Exhibit 1, Paragraph 10, at 4, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-526315-1509703.pdf ("Plaintiff's Letter").

This government mandate also means any identifier – whether offered by a for-profit competitor or by an open source, not-for-profit organization – faces significant headwinds. Such an identifier must be exceptionally impactful for a particular use case to gain traction. Clearly FIGI has gained traction and is perfectly suited to the federal government's evolving data management needs.

The Proposal calls for the implementing Agencies to consult with a variety of federal governmental entities with relevant experience and public stakeholders with relevant experience in advance of issuing the Proposal.[35] "These consultations provided the implementing Agencies and Treasury with an even greater understanding of the issues involved in establishing and adopting the joint standards."[36] After this robust process, the Agencies and FSOC selected FIGI not only because it met the requirements of the Act (open-membership standards consortium, an international identifier for all classes of financial instruments, including, but not limited to, securities and digital assets, a global non-proprietary identifier available under an open license), but was also flexibility for use in multiple functions.[37] As our prior Bloomberg Letter explains, interoperability problems are not simply a generic security identification issue but rather the need for a new data management model that unifies security attributes, symbols and other identifiers for the use case of managing securities in the disparate federal databases.

FIGI has been in the public domain since 2014 and was recognized as an American National Standard (X9.145) in 2021 by the American National Standards Institute (ANSI) – **the same organization** that recognized CUSIP (X9.6) as an American National Standard in 1976.[38] While CUSIP is not an ISO standard (and for good reasons)[39], Bloomberg is not certain why some commenters believe that the Agencies should place greater emphasis on or consideration for ISO designations than the U.S. ANSI standard.

Bloomberg's development of the FIGI data model was not unilateral. The origins of FIGI started back in 2008 and was born out of industry needs, including Bloomberg's internal ones. Like the industry, Bloomberg had specific concerns, including:

(1) Growing proprietary identifier licensing fees and restrictions: Identifier dependency was becoming a potential business and strategy risk concern. Licensing fees were increasing reflecting the de facto monopoly power, and terms included growing restrictions on redistribution. Both the fees and restrictions presented a credible business risk – a risk that

[35] Section 124(c)(2)(A) of the Financial Stability Act.

[36] Id.

[37] Id.

[38] *See* ABA Letter, Appendix E, at 61.

[39] *See* European Fund and Asset Management Association, "US-ISIN COMPETITION CASE – CASE COMP/39.592 – EFAMA VS S&P", (2017), at 6, "American Bankers Association (ABA) and S&P have not obtained certification by ISO and/or ANNA (as the registration authority of the ISO 6166 standard) that the US ISIN license fees are charged on 'at cost basis' as mandated by ISO rules."

restrictions could one day impede internally managing data across the enterprise effectively and strategy risks that the fees and restrictions could rise to the level in which they were a business development impediment – requiring "permission" to use data with identifiers stifling innovation. These are some of the concerns that Dinosaur Financial is currently litigating in its class action lawsuit regarding CUSIP licensing fees.[40]

(2) Identifier governance that conflicted with data management needs: Bloomberg and other market data professionals were struggling with cross-referencing between proprietary identifiers and corporate actions that triggered an identifier change. Addressing this defect (in the data management sense) required a complicated daisy-chaining of market and reference data to retain interoperability and historical lineage for investment research, investment banking and other use-cases. Bloomberg and the industry's use cases for security identification were not simply for the use case of execution, settlement and clearance of the investment life cycle, but needed to service a different mandate for which the incumbent identifiers are not well suited.

Bloomberg engaged with several industry groups to survey their membership, gain feedback and insight and to build consensus on its approach to Financial Reference Data. Specifically, Bloomberg worked with its clients, SROs, and the EDM Council during research and development in 2008 and 2009. Bloomberg utilized industry groups such as SIIA FISD (as far back as 1999), and existing industry whitepapers (some published as far back as 2001), that called into question data management issues with existing security identifiers such as CUSIP and ISIN.[41] Illustrating how data management standards were an area of broad market participant

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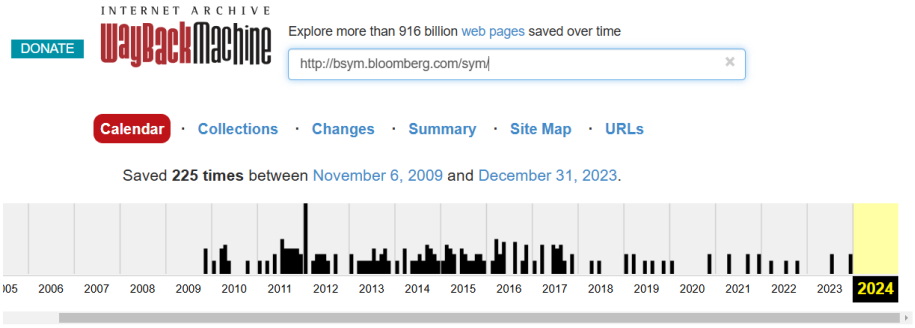
[40] Plaintiffs Dinosaur Financial Group LLC, Hildene Capital Management, LLC, and Swiss Life Investment Management Holding AG (collectively, "Plaintiffs"), on behalf of themselves and all others similarly situated, by their attorneys, Competition Law Partners PLLC, Kaplan, Fox & Kilsheimer LLP, and Wollmuth Maher & Deutsch LLP are currently litigating a class action lawsuit filed regarding CUSIP licensing fees. *See* Plaintiff's Letter, Exhibit 1.

[41] *See* (1) FISD, Symbology/Security Identification: "Report from Meeting of Unique Security ID Committee" (April 18, 2001), available via the WayBack Machine Internet Archive (https://web.archive.org/), via the WayBack's URL search http://www.fisd.net/symbology/042001.asp; Unique Security Identification Project: Status of FISD Inquiry Summary of Meetings on May 4 and May 10, 2001 available via the WayBack Machine Internet Archive, at http://www.fisd.net/symbology/050401_status.asp; Security Identification Requirements (Vendor), "What are the problem situations", available via the WayBack Machine Internet Archive, at http://www.fisd.net/symbology/050201_banerjee.asp.
(2) Iman Szeto, et. Al., "In Search of Unique Instrument Identifier," Discussion Paper, (June 2003) Reference Data User Group (RDUG), an international coordinating body of broker/dealers, investment managers, custodian banks, depositories and others designed to define the data elements and standards necessary to precisely describe the assets and account entries required to make global trade processing more efficient, and Reference Data Coalition (REDAC), a coalition supported by the members SIIA's Financial Information Services Division (FISD), the Securities Industry Association (SIA), ISITC-IOA, the Securities Markets Practice Group (SMPG) and the Bond Markets Association (BMA), *available at* https://www.slideshare.net/slideshow/original-uii-paper-2003/65835652.
(3) Increasing industry frustration with emerging needs vs incumbent identifier capabilities can be seen in: Sara Banerjee, "Streamlining ISIN Maintenance", SIIA FISD Presentation to the ANNA Board, (November 12, 1999) and James Economides, Andrew Douglas, "ISIN Utility", Presentation at SIIA FISD Meeting, (August 2, 2000).

discussion, WatersTechnology Staff penned a "Data Management" article entitled "Raising the Bar on Standards Development" in 2006.[42]

In late 2009, drawing on industry and client input, Bloomberg successfully deployed the identifier and attendant metadata fields that ultimately became FIGI to address Bloomberg's own data management needs – providing a fully implemented "use case study" for this new data model. In 2010, Bloomberg placed the identifier – known as "Bloomberg Identifier" ("BBGID") and attendant metadata fields in the public domain and made it available as an open source, unlicensed and freely redistributable utility to help address the growing industry need for a new data management model that addressed unique identification, permanence, and granularity issues. Engagement with the industry continued. Bloomberg established and published a quarterly "Open Symbology Newsletter" as part of that ongoing interaction (Figures 3 and 4).

Figures 3 and 4 are courtesy of the internet archives' WayBack Machine:



[42] See WatersTechnology Staff, "Data Management: Raising the Bar on Standards Development", (August 1, 2006), *available at* https://www.waterstechnology.com/inside-reference-data/opinion/1634820/raising-bar-standards-development.

Bloomberg Open Symbology Mapping Service is now available [Click here to register]

Many of the systems in use today across the securities industry have been built around proprietary, closed standards used to identify securities. Today, there are hundreds of such symbology sets, created by vendors, markets and the companies themselves. Users rely on different codes to identify securities (so called market data or market identifiers), either for trading, settlements or clearing. Most of the existing reference data sets have their own commercial terms that limit and restrict usage. Supporting this multiplicity of standards has created systems that inflate the cost of maintenance and hamper the ability of companies to reinvest on new innovations. This process keeps companies from fully streamlining operations and realizing efficiencies across business units.

An effective symbology for any class of instrument must have broad coverage, be freely available, flexible enough for use in multiple functions, allow mapping to alternative symbologies used in related functions, and be dynamic enough to immediately account for the many instruments that arise, expire, and change on a daily basis.

In response to the market demand for open systems and symbology, Bloomberg has also made available the new security identifier "BBGID" through Bloomberg's Open Symbology portal delivery with no material impediment on redistribution. This move allows firms to abandon proprietary codes, eliminate redundant mapping processes, streamline the trade workflow and reduce operational risk. The Bloomberg Global ID is a 12 digit alpha-numeric, randomly generated ID covering active and non-active securities. In total, there will be more than 852 billion potential numbers available.

Open Symbology Press Releases:

- NASDAQ Adopts Bloomberg Open Symbology
- Bolsa Mexicana Adopts Bloomberg Open Symbology
- SIM Venture Exchange Adopts Bloomberg Open Symbology
- National Stock Exchange of Australia Adopts Bloomberg Open Symbology
- MCX of India Adopts Bloomberg Symbology for Commodities Contracts
- FINRA Press Release
- SIX Financial Information

Key Benefits:

- Coverage: BBGID provides comprehensive global coverage of the financial markets and the ID will be invaluable for those lacking an identifier like loans, and futures and options.
- Consistency: Based on the same identifiers used in the Bloomberg Professional® service and Bloomberg's Enterprise Data Products.
- Delivery: Submission form via dedicated portal bsym.bloomberg.com and dedicated feed of all new securities added.
- Access: BSYM identifiers are available through Bloomberg's website with no material impediments on use.
- Global Reach: The Bloomberg Professional service is on the desktop of more than 300,000 financial professionals around the globe.
- Uniqueness: UNIQUE, NON-CHANGING identifier that covers all GLOBAL financial instruments with no restrictions on usage.

Bloomberg will continue to update, build, and administer its identifiers to ensure they continue to serve as effective symbols for the broad uses required in today's financial markets.

Open Symbology Newsletters:

- 2012 - 1st Quarter
- 2012 - 2nd Quarter
- 2012 - 3rd Quarter
- 2012 - 4th Quarter
- 2013 - 1th Quarter
- 2013 - 2th Quarter
- 2013 - 3th Quarter
- 2013 - 4th Quarter
- 2014 - 1st Quarter

Click here to learn more about the benefits of Open Symbology.

For technical details on how to implement BSYM, download the following:
BSYM Technical Whitepaper
BBGID Allocation Rules

Figure 3. Bloomberg Open Symbology Website.

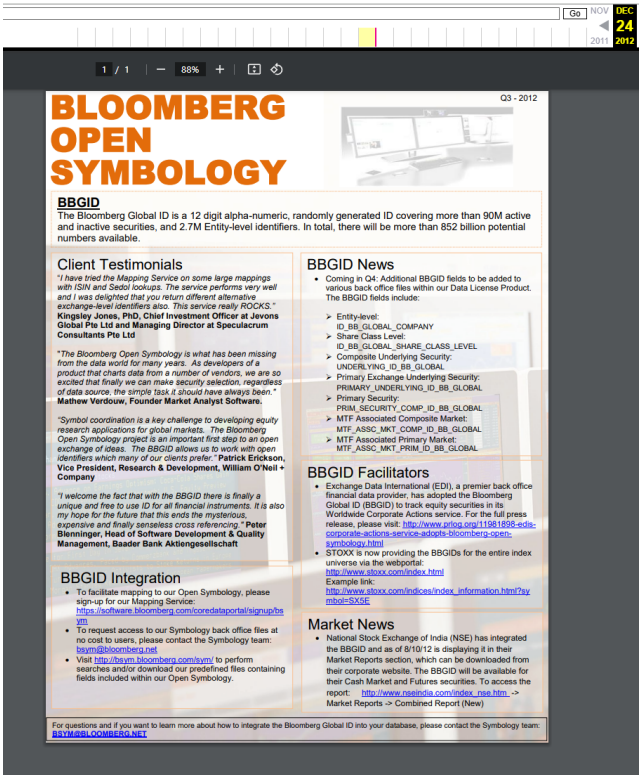


Figure 4. An archived Open Symbology Newsletter.

It was through that engagement that Bloomberg assigned all rights to the Object Management Group. The ABA assertion that "the name change to FIGI was simply a marketing move to increase the appearance of neutrality"[43] is demonstrably inaccurate. Bloomberg legally relinquished rights associated with the data management model in perpetuity. FIGI is an Object Management Group standard. Indeed – as the ABA well knows – it was OMG who petitioned X9 to commence and ultimately complete the multi-year process of standard certification.[44] As Bloomberg does not own the relevant IP, only OMG controls the standard.

To summarize. Bloomberg – in consultation with clients and industry – devised the FIGI. Bloomberg uses the open source FIGI for data management. (Given the 15 billion monthly downloads of FIGI, Bloomberg has much company as a FIGI user). Bloomberg is an active user/consumer of other open-source standards and software.[45] Bloomberg has not had an ownership interest in FIGI for the past 15 years. The data shows FIGI usage growing – 15 billion security download requests a month is significant and demonstrates that FIGI is both "established" and "used."[46] The only plausible and logical explanation for why more than 135 market data vendors support FIGI in their commercial offerings[47] is market demand. Demand is growing because there is an expanding list of use cases where the FIGI standard is being applied to help solve complex data management challenges (See Appendix 1).

The ABA offers no explanation as to why there should be 235 billion security download requests for FIGI over the past two years if FIGI is not established as an identifier. The only evidence that the ABA and Dr. Lewis offer as an "indication" that FIGI is not "established" or widely used is that none of the 10 largest investment managers, "only" 12% of the largest 50 institutional managers, "only" 4.3% among the smallest 1,000 institutional managers, and less than 1% of the smallest 500 filers *voluntarily* reported at least one FIGI when filing their SEC Form 13F.[48]

Consider that with no mandate or incentives to use FIGI in their 13F reports an average of 12% of investment managers ***voluntarily*** included a FIGI. Who voluntarily reported using a

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[43] *See* ABA letter at 35-36.

[44] *See* ANSI X9 FIGI Standard Approval, Accredited Standards Committee X9 that developed the standard had the following members: American Bankers Association, Bloomberg LP, CUSIP Global Services, FIX Protocol Ltd – FPL, ISITC, J.P. Morgan Chase, Object Management Group (OMG), Office of Financial Research, U.S. Treasury Department, U.S. Bank University Bank, Wells Fargo Bank.

[45] *See* Bloomberg, "Tech At Bloomberg Open Source", *available at* https://www.bloomberg.com/company/values/tech-at-bloomberg/open-source/#:~:text=Bloomberg%20sits%20at%20the%20intersection,meet%2080%25%20of%20our%20requirements.

[46] *See* Bloomberg Letter, Appendix C, Figure 1, at 66.

[47] *Id*., Appendix C, Figure 2, at 67.

[48] *See* ABA Letter, Craig Lewis, PhD., "Analysis of Voluntarily Reported Financial Instrument Global Identifiers (FIGIs) in SEC Form 13F Filings" (October 10, 2024), Appendix 1, at 94.

FIGI? Dr. Lewis tells us that it's the mid and small tier investment managers. If utilizing FIGI was as costly as suggested, small and mid-sized investment managers would never ***voluntarily*** use FIGI. This group is quite possibly the most incentivized group to ***not voluntarily*** incur the expense of changing their reporting processes to include FIGI (see Appendix 2). Yet – despite the fact that they will still need a CUSIP to report, they have included a FIGI, suggesting clearly that FIGIs are already in use, mapped, and the cost and complication of using it are minimal.

2. Inaccurate Assertion: FIGI is not fungible.

While the ABA asserts FIGI is not fungible, that assertion is clearly at variance with reality. FIGI is an innovative data model. The equity share class FIGI identifies the listed company regardless of the country and the exchange that the shares trade. In non-equity asset classes, the base level FIGI serves the same capacity. This is the very definition of fungibility.

The ABA further asserts that FIGI errors flow from FIGI not being "fungible." Let's examine reporting of equity positions using FIGI. Dr. Lewis' analysis shows that over 90% of FIGIs submitted were at the share class level, consistent with the guidance. Most of the remaining positions leveraged the country composite FIGI. In essence, submitters had the correct TV but selected the wrong channel. But all FIGIs at exchange-level or country composite roll up to the share class level, so it is always possible to capture the full picture for any such reporting and the SEC could use the metadata to roll the exchange-level or country composite to the share class (See Appendix 3, Figure A and the Microsoft example, Figure B). In short, these errors are easily remedied by the Agency receiving the filing, and likely will be reduced in any event as reporters become more accustomed to FIGI's properties.

There were significant CUSIP reporting errors despite the fact that CUSIP has been the mandatory standard reporting identifier for SEC Form 13F since the reporting requirement's inception in 1975. Bloomberg's analysis shows that errors range from using "dummy CUSIPs" to report the underlying in an option position (see Appendix 2) to an out-of-date CUSIP (e.g., reporting the prior CUSIP rather than the new CUSIP when it changed from corporate action, see Appendix 3).

Note that the phenomenon of errors due to "dummy CUSIPS" will be a challenge to remedy. Likewise, errors flowing from CUSIP changing identification numbers in response to corporate actions is hard to remedy. By contrast – FIGI errors flowing from submitters referencing the venue rather than the share level are easily remedied through risk alerts or guidance to filers or by the Agency simply exploiting FIGIs metadata capacity that links the venue identifier to the share level identifier.

Dr. Lewis's data shows that the government has mandated CUSIP in 61 Agency Rules, Regulations and Forms, and 49 Laws, Rules and Regulations [49] mainly because CUSIP was the only identifier. These mandates have effectively created a government-sponsored monopoly without adequate investor protection of the sort generally available with sole-source providers of critical market data. [50] In Phase II, the Agencies, under the FDTA and individual rulemaking process, may introduce the joint open-source standard identifier to prompt a more competitive landscape. [51]

In response to Commissioner Peirce's question "Will certain types of entities, such as municipal issuers, bear disproportionate FDTA-related costs? If so, what can we do to reduce those costs?", Bloomberg believes that this question is among the reasons why Congress chose to implement the FDTA in two-phases. In Phase II, the Agencies must determine whether the benefits outweigh the costs. The SEC may conclude with municipal securities, where an entire eco-system has been built around CUSIPs, (1) that it is less disruptive and more advantageous to the public to continue to rely on CUSIP and the appropriate Agency will map the CUSIP to the joint standard for the purposes of data interoperability; or (2) the market may be allowed to use either the incumbent identifier, CUSIP, "OR" open-source FIGI to try and reduce consequences of the CUSIP mandate (e.g., a de facto government sponsored monopoly) by providing the public with options.

The ABA asserts that FIGI is confusing: "[FIGI] is a complex and diffuse identification system..." [52] Yet, in Loans, rather than relying on the legacy standard from the 1960's, CUSIP deployed a hierarchical methodology model (similar to FIGI) and represented it as an innovation rather than a complex or a diffuse identification system.[53] What is confusing is that in the same

[49] *See* ABA Letter, Appendix A at 39-47.

[50] *See* Bloomberg Letter at 29 n. 104.

[51] *See* Letter from the Investment Adviser Association at 5, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-532800-1528664.pdf ("IIA Letter"). "In this way, financial instrument identifiers act as an essential public utility—and should be treated as such, not just for regulatory reporting purposes, but for all purposes. Congress understood this when it directed in the FDTA that common financial instrument identifiers should not be provided by a proprietary, for-profit, commercial enterprise, but, rather, to the extent practicable, they should be nonproprietary or made available under an open license. The IAA strongly supports this statutory directive and urges the Agencies to follow it… "[T]he Agencies should certainly not establish, facilitate, or entrench monopoly power for a provider of identifiers by allowing it to charge commercial prices or control its own pricing and terms."

[52] See ABA Letter, at 20 and Dr. Lewis, Appendix 1, Paragraphs 2 and 3 at Page 90-91. 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" is a different issue than "FIGI fungibility" and the Agencies' data management requirements – these concerns can be addressed in Phase II **if** the Agencies expand the acceptable reporting identifiers.

[53] *See* Bloomberg Letter at 27-28, n. 102 (citing publicly available "CGS Syndicated Loans" documentation).

letter(s) commenters insist that FIGI is not fungible [54] only later concede that FIGI is fungible. [55] Bloomberg believes that the Chief Data Officers understand the FIGI data model and it is why they collectively recommended it to solve their specific use case. To clear up any confusion, Bloomberg offers Appendix 3 – a partial summary of the "Allocation Rules for The Financial Instrument Global Identifier (FIGI) Standard." [56] Appendix 3 explains FIGI's equity hierarchy and for each asset class, through a series of screenshots from OpenFIGI.com search results, the appropriate FIGI identifier column is highlighted and the corresponding OpenFIGI.com API field for the OpenFIGI API is noted.

Appendix 3 also annotates the Microsoft example that one commenter included with a series of screenshots from OpenFIGI.com illustrating that there are 220 exchanges for Microsoft. The commenter's appendix was included purportedly to show that FIGI is not fungible but Bloomberg provided annotation based on the open source FIGI allocation rules document to demonstrate FIGI's fungibility. Appendix 3 provides more detail but the screenshots clearly show that all of the Microsoft "FIGIs", across the different "FIGI (country) Composite" IDs, have the same (global) "Share Class FIGI", "BBG001S5TD05" [57] and its Share Class FIGI maps 1:1 to other alternative identifiers.

The "fungibility" concerns are extremely curious because, as the Accredited Standards Committee (ASC) X9 explained, "FIGI originated from a need for a standard methodology to bridge across multiple identification systems for financial instruments." [58] Each FIGI is

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[54] *See* ABA Letter at 20, "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" and Letter from CUSIP Global Services ("CUSIP Letter") at 14, "[T]he issue of fungibility for financial instrument identifiers is a giant hurdle to interoperability for financial data reporting. The nonfungible nature of FIGI works against the FDTA's purpose of promoting interoperability of financial regulatory data across the Agencies" *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-532555-1528522.pdf.

[55] *See* ABA Letter at 21, "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.***" (emphasis added).

[56] *See* Object Management Group, "Allocation Rules for The Financial Instrument Global Identifier (FIG) Standard", Version 29.9, (July 2022), *available at* https://www.openfigi.com/assets/local/figi-allocation-rules.pdf.

[57] *See* ABA Letter, Appendix C, at 49.

[58] *See* Bloomberg Letter at 6 n. 19, citing ANSI X9 FIGI Standard Approval. "In approving the FIGI as a U.S. national standard, the Accredited Standards Committee (ASC) X9 explained that FIGI originated from a specific use case – the need for a financial instrument data management standard: "***FIGI originated from a need for a standard methodology to bridge across multiple identification systems for financial instruments***. Without prejudice against any existing symbol-based solutions, or any question of the validity of one system over the other, **the FIGI standard utilizes a metadata driven approach to enable the unique and persistent identification of financial instruments**. In so doing, while employing the principles of open data, ***it provides a mechanism for interoperability between existing identification systems."*** (emphasis added). *See also* Bloomberg Letter at 7. "The 23 members of the ASC X9D1 subcommittee that produced the FIGI standard included representatives from the American Bankers Association ("ABA"), Bloomberg L.P., CUSIP Global Services ("CGS"), the US Department of Treasury's Office of Financial Research ("OFR"), among others."

persistent and unique. As a practical matter, if FIGI was not fungible, it could not be interoperable, it would be impossible to operationally map and it would be implausible for market data and third-party service providers to support FIGI. [59]

3. Inaccurate Assertion: It is not Clear that Mapping is Even Possible.

Some questioned the viability of mapping. One commenter believed that, "… 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 at all given that CUSIP and FIGI are not readily interchangeable and FIGI is not fungible." [60] Placing aside that in Phase I, the FDTA does not "force" any changes on the financial markets or market participants, and that the Agencies in Phase II will assess whether the cost of "mapping" is a burden, the assertion that the mapping exercise is "extensive" or "it is not clear this is even possible" is inaccurate. As an initial matter, FIGI is fungible and mappable (See Appendix 3).

DTCC is able to map RIC to ISIN, CUSIP, SEDOL, etc., (see Appendix 5). Clearly mapping to the allocation rules for the fungible FIGI is not the challenge some suggest. (see Appendix 3 – The FIGI Allocation Rules Identify the Appropriate FIGI to use).

Mapping is typically regarded as a licensing and redistribution "rights" problem, not an exotic technology problem. If the party seeking to map has the appropriate licenses, then mapping is possible. In fact, in a 2012 European Commission Reuters Instrument Codes Antitrust Procedure, mapping was seen as a remedy. [61]

OpenFIGI currently offers mapping. Input an alternative identifier into the OpenFIGI.com search, and its fungible FIGI is returned. As this process occurs 15 billion times a month – without charge – it is hard to argue that there are significant cost or technology issues in mapping. It is the CUSIP and ISIN licensing redistribution restrictions that inhibit inputting a FIGI and receiving the alternative identifier back – OpenFIGI cannot provide such search capabilities because it cannot validate that the user has the appropriate license for CUSIP's or ISIN's data. Third-party providers, such as Magtia, and EDI (see EDI case study in Appendix 1) also offer mapping services. [62] And, over 135 market data providers are already mapping several alternative security identifiers to FIGI in their data offering(s), Given that vendor uptake, it is

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[59] *See* Bloomberg Letter, Appendix C, at 66-74.

[60] *See* ABA Letter at 23-24.

[61] *See* European Commission, CASE AT.39654 – Reuters Instrument Codes, (December 20, 2012), *available at* https://ec.europa.eu/competition/antitrust/cases/dec_docs/39654/39654_2861_16.pdf.

[62] *See* Magtia, "Mapping Financial Symbology enabling you to seamlessly utilise multiple data sources", *available at* https://www.magtia.com/. "Is it permissible to perform FIGI mapping? Yes, FIGI is open source and provided free of charge by the Object Management Group. Its purpose is to enable all market participants to consistently identify financial instruments." *See also* FAQs *available at*, https://www.magtia.com/ric-mapping-faq/,

likely that market participants can consume FIGI from their current market data provider negating the need to "hire" another third-party. [63]

4. **Inaccurate Assertion: FIGI is incomplete - Many securities do not have an assigned FIGI.**

One commenter offered as evidence of FIGI's incompleteness the example of a new bond offering for Collin County Community College District Consolidated Fund Revenue Bonds, Series 2024. The CUSIP 194742FS6 was issued on October 16, 2024, at 12:10 p.m. and CGS published a CUSIP for the bond 5 minutes after at 12:15 p.m. The commenter noted that as of October 21, 2024, at 9:00 a.m., this new issuance has yet to be published on OpenFIGI." [64]

The explanation for this is not complicated and was readily available as a matter of public record. The OMG Registration Authority had created a preliminary FIGI on October 16 but was unable to publish it on OpenFIGI (on October 21—the date the commenter chronicled its concerns in a submission to the SEC) because, consistent with the MSRB's EMMA database (Figure 5), the issue had yet to be awarded. The FIGI bond ticker/description could not have been formed prior to the award (Figure 6). According to the MSRB (Figure 5), the issue was, in fact, awarded two-days after the comment letter was submitted, on October 23, at 1:15pm and the first execution was a few hours later.

[63] *See* Bloomberg Letter, Appendix C, at 66-74.
[64] *See* ABA Letter at n. 140, p. 60.

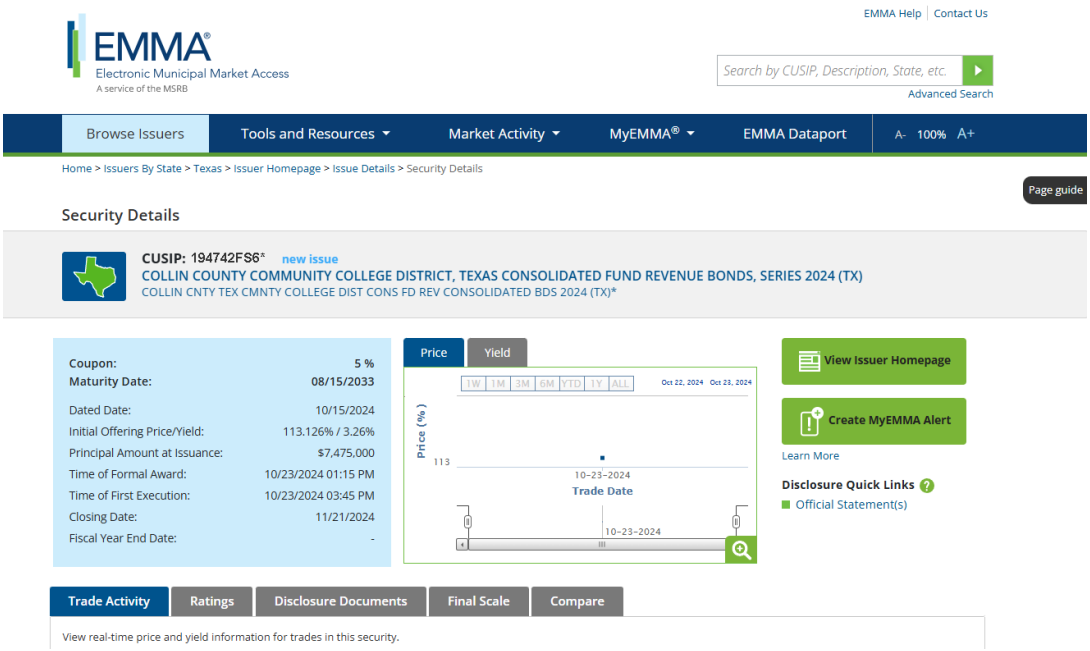

Figure 5. EMMA database with the security details for Collin County Community College District Consolidated Fund Revenue Bonds, Series 2024.

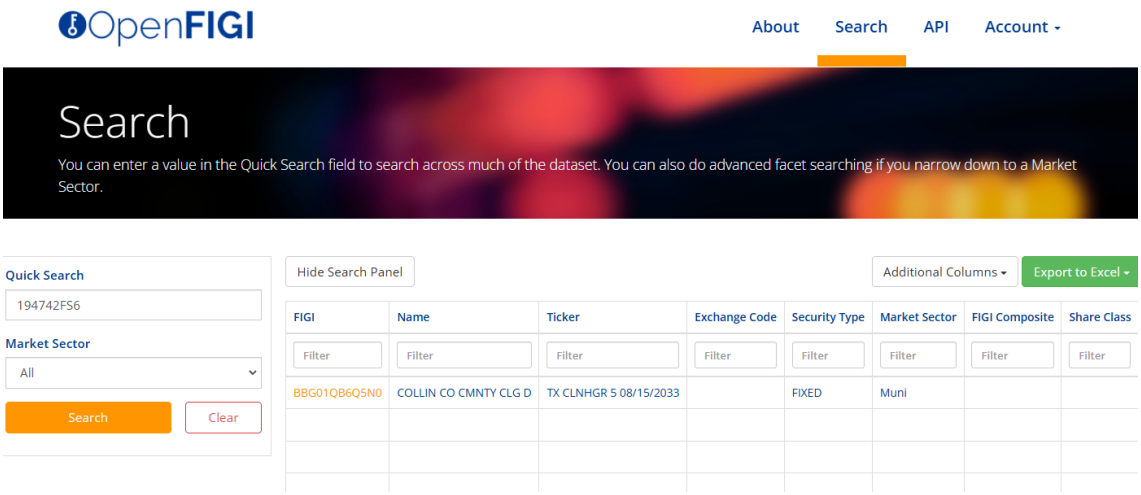

Figure 6: OpenFIGI.com details for Collin County Community College District 5% 8/15/2023.

The commenter notes that an aggressive and thorough search of OpenFIGI was conducted, resulting in the discovery of an "error" which wasn't an error. This speaks volumes to the quality of FIGI and its data.

Bloomberg believes the ability to aggressively "kick the tires" as the commenter did is a very positive thing. Moreover, that option was possible because FIGI is an open-source identifier. The fact that the commenter was able to conduct this research obviously underscores that FIGI is open source. There is no comparable process by which CUSIPs could be tested.

As Bloomberg previously noted "Beyond equities, there is no identification framework that has 100% coverage." [65] Bloomberg agrees that in OTC markets, inevitably there will be instances of incompleteness. While Bloomberg believes that the statement "Many securities do not have an assigned FIGI" is an exaggeration, the reality is, it is irrelevant. There is no cost to request and receive a FIGI. [66] Where instances occur, with over 12,000 OpenFIGI API connections and 15 billion downloads a month, FIGI has a broad feed-back loop and mechanisms for correction. And, as noted in Appendix 1 in the EDI case study, "Any exceptions or missing data are then sent to the Open Symbology team [the OpenFIGI Help Desk] for further verification."

5. Inaccurate Assertion: OpenFIGI does not provide enough information to identify a security.

The OMG FIGI standard approved by American National Standard (ANSI), Accredited Standards Committee (ASC) X9 includes a description of market sector (asset class) and the key information elements that are required to uniquely identify a financial instrument. The OpenFIGI.com web-based or API-based query of a FIGI or alternative identifier displays – without charge – these data elements in the 8 to 13 different columns of data and associated metadata contained in the fields.[67]

Several commenters said that because FIGI only provides the elements necessary to identify a security, consumers may need to purchase a data package from a data vendor if the consumer wants to do more than simply identify an instrument. This is often conveyed by the assertion that the data product provided for free by FIGI is not substitutable for all purposes with the data product provided by CUSIP.

In the U.S., the business model of CUSIP and the ABA is not to separately provide just the 8 to 12 fields necessary to identify an instrument. Purchasing the data to identify an instrument requires the purchase of 60 fields of data – the majority of which are not necessary for identifying an instrument. [68] While these additional fields may be valuable in many contexts, the federal government may not want or need to purchase any or all of the additional data – for example, certain agencies may only need a security identifier for interoperability purposes.

CUSIP and the ABA explained in a 2017 press release that not all of the descriptive data that CUSIP provides in the U.S. is needed to identify a security. In the European Union, CUSIP and the ABA provide CUSIP-based ISIN with a "basic service", for a reduced fee, that "was

[65] *See* Bloomberg Letter, Appendix D, at 76-77.
[66] *Id.* at 77.
[67] *See* Bloomberg Letter at 9, 22, n. 64.
[68] *See* Plaintiff's Letter Exhibit 2, at 69-70 (The Westlaw Citation of The Opinion and Order, transcript 2-3).

designed for certain market participants in the EEA who have unique, regional requirements and therefore need less comprehensive security identifier data than had been previously made available." [69] Each identifier standard, whether it is CUSIP, ISIN, FIGI, SEDOL, etc., includes a list of the minimum amount of "mandatory" data elements. In a comparison of ISIN v. FIGI, the mandatory key data elements offered by ISIN are also very similar to the FIGI (See Appendix 4).[70] The CUSIP owners' claim that these key elements are inadequate in the FDTA context is inconsistent with their representation in the context of their "Basic ISIN" service offering in the European Union that the opposite is true, that the same key elements are adequate to identify a security.

One commentator offered three examples of JP Morgan bonds that were difficult to identify using a FIGI [FIGI/CUSIP: (1) BBG004WJ4H39/48124JU89, (2) BBG004WG0D83/48124JU63 and (3) BBG004V12R11/48124JU30] appear, from the OpenFIGI.com data, virtually the same. [71]

It is not clear that the CUSIP Master File (or even ISIN descriptive data) would have fared much better identifying the three J.P. Morgan bonds. The screenshots provided in the example makes it difficult distinguishing the three issues. It's unclear whether the first coupon date – populated in one issue and blank in another – is defining an identification data point that enables separation of nearly identical issues.

But the analysis as presented, omits that OpenFIGI also provides extensive lookup capabilities that include over 200 security descriptors that can be included in a search using the security description. [72] This is another extremely useful way to look up the associated FIGI. In short, FIGI provides a robust process to achieve clarity.

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[69] *See* ABA and CUSIP Global Services, (March 17, 2017), Press Release, "CUSIP Global Services Voluntarily Extends Offering of U.S. ISIN Basic Service", *available at* https://pages.marketintelligence.spglobal.com/rs/565-BDO-100/images/CGS-Other-Voluntarily%20Extends%20Offering-170317.pdf. "CUSIP Global Services (CGS) a leading provider of unique security and entity identifiers and descriptive data that enable efficient global trading, today announced that it has voluntarily offered to continue operating in the spirit of its November 2011 Commitments with the European Commission (EC). In doing so, CGS will continue to make the US ISIN Basic Service available to users, under the current terms, within the European Economic Area (EEA) after the April expiration of the five-year term of the Commitments."

[70] The ISIN 6166 standard specifies the ISIN mandatory fields. Unlike OpenFIGI.com, the "Free ISIN Lookup Service" requires potential users to register and be approved to perform any search. Access is gated - only five (5) records can be downloaded at a time. While the service is still without charge and on a non-discriminatory basis, OpenFIGI API users are required to register mainly for security purposes and so that the operators have a contact to help optimize bulk-request usage. OpenFIGI searches do not limit downloads. Requests via the OpenFIGI API, does place restriction of 25,000 securities per minute per API session for load-stabilization – so that each requester has the same access and response experience. Users can request multiple API sessions.

[71] *See* ABA Letter at 26-27 and Craig M. Lewis, PhD, Exhibit 1, at 85, and CUSIP Letter at 7, FN 17.

[72] *See* OpenFIGI, "V3 Mapping" for a complete list of security search attributes and examples, *available at* https://www.openfigi.com/api#v3. The extensive security descriptors are extremely helpful in identifying Municipal securities.

Given the universe of 1.3BN FIGIs, the identification of three bonds lacking clarity is an astounding accuracy rate. The nature, as well as the number of these bonds make it clear these are truly edge cases of little practical relevance. Consider that:

(1) BBG004WJ4H39 is **not** TRACE eligible and the issue size is only 2,000,000;
(2) BBG004WG0D83 is **not** TRACE eligible and the issue size is only 3,304,000; and
(3) BBG004V12R11 is **not** TRACE eligible and the issue size is only 2,000,000.

Congress created the FDTA so that (at least) nine federal regulatory databases could be interoperable facilitating the Agencies and FSOC identification of areas of global financial instability. These bonds do not represent and would not be a part of a study of bond issues that could cause or even remotely indicate a market disruption.

A commenter incorrectly asserted that there is a dependency on Bloomberg for its "proprietary exchange code" – that the ISO standardized MIC code is not supported. [73] In the OpenFIGI "API" section, the ISO MIC code is supported as a security description input and a mapping from the Bloomberg code to the MIC code is available under "click here" (Figure 7). A .csv file mapping is available on OpenFIGI.com. [74]

`exchCode`	`String`		Exchange code of the desired instrument(s) (cannot use in conjunction with `micCode`). Click here for the current list of `exchCode` values.
`micCode`	`String`		ISO market identification code(MIC) of the desired instrument(s) (cannot use in conjunction with `exchCode`). Click here for the current list of `micCode` values.

Figure 7. OpenFIGI API request format exchange code / MIC. [75]

One commentator concluded that in their research using the OpenFIGI "the API function on OpenFIGI is not fit for the task." [76] They stated that mapping is "a time- consuming process and it would not result in the reference data needed…. to map 22,000 securities took several hours and suffered from numerous errors with the API". [77]

[73] *See* ABA letter at 36.
[74] *See* https://www.openfigi.com/assets/content/OpenFIGI_Exchange_Codes-3d3e5936ba.csv.
[75] Additionally, an internet search, "What is the MIC code for Bloomberg CN", provides the ISO code.
[76] *See* ABA Letter at 30.
[77] *Id*. at 31, n. 145.

The OpenFIGI Help Desk has extensive experience working with OpenFIGI API users, institutions, market data vendors and third-party services that have integrated FIGI into their systems and offerings. [78] The OpenFIGI Help Desk works with first-time and long-time users (at no cost) to implement a seamless workflow from their systems to the OpenFIGI database via the OpenFIGI API. In a case study, available in the public domain, that is very similar to the Agencies' use-case, Bloomberg worked with Exchange Data International Limited (EDI) to initially ingest flat-files and then upgrade to the OpenFIGI API. [79]

Based on the experience of over 12,000 API accounts including the 3,334 new API accounts since January 2023, [80] currently in production if the user has implemented a way to read and write to their database via an API, mapping IDs takes about 30-minutes' worth of developer time. However, if the user requirement includes creating all the components for an end-to-end capability via the OpenFIGI API, the OpenFIGI Help Desk has found that it typically takes a developer about 2 weeks. After the initial setup, generally, there is little ongoing maintenance.

In OpenFIGI's experience, based on the 12 to 15 billion monthly OpenFIGI security download requests – the elapsed time from submitting an API query to its delivery for 22,000 securities takes about 1 minute to complete. It is unclear why it took the commenter "several hours." Certainly, OpenFIGI would not be able to accommodate 15 billion requests a month – if the commenter's reported experience was remotely the norm.

The OpenFIGI Help Desk is available for support to those who avail themselves of its services. The OpenFIGI Help Desk receives queries during the day for clarifications, so "…if a FIGI cannot be located, the website provides a mechanism to contact a FIGI administrator for additional help." [81]

Some commenters also suggested that firms would likely need to "hire" a third-party vendor to do the task. [82] As an initial matter, with over 135 market data providers already mapping several alternative security identifiers to FIGI in their data offering(s), it is likely that participants may be able to consume FIGI from their current market data provider negating the need to "hire" another third-party. [83]

Finally, Bloomberg noted that OpenFIGI Help Desk receives queries during the day for clarifications, so "…if a FIGI cannot be located, the website provides a mechanism to contact a

[78] *See* Appendix 1 and Bloomberg Letter, Appendix C, at 70-74.
[79] *See* the Exchange Data International Limited (EDI) Case Study in Appendix 1.
[80] *See* Bloomberg Letter, Appendix C, "New API Accounts", Figure 1, at 66.
[81] *See* Bloomberg Letter at 38.
[82] *See* ABA Letter at 31.
[83] *See* Bloomberg Letter, Appendix C, at 66-74.

FIGI administrator for additional help."[84] As discussed, the FIGI framework does not force reliance or adoption of a single market data vendor's product, including Bloomberg. [85] By separating the identifier from additional data, it enhances competition among market data providers – enabling competition on service and quality. While FIGI is a utility, the broad use of FIGI among numerous vendors, including Bloomberg, provides a significant "crowdsourcing" touch point – one of the many controls and processes in place to ensure the quality of FIGI.

6. Inaccurate assertion: Designation of FIGI Provides Bloomberg with an Unfair/Unearned Competitive Advantage.

Some commenters asserted that the designation of FIGI provides Bloomberg with an unfair/unearned competitive advantage. [86] Commenter's concerns include: (1) FIGI forces a reliance on Bloomberg; and (2) Bloomberg will – in some unexplained fashion – somehow claw-back the assigned intellectual property rights and all associated FIGI copywrites and trademarks owned by the Object Management Group for more than a decade.

FIGI is offered under the MIT Open Source License. This license is built into the standard. Bloomberg is simply unable to "later decided to change its commercial model and/or reclaim the rights to FIGI from the Object Management Group" as some commenters allege. [87] OMG is the holder of the standard. OMG owns the trademark.

Likewise, 135 data vendors and other third parties leverage FIGI in their offerings. FIGI is vendor-neutral. You do not need a Bloomberg Terminal or any Bloomberg related service to use FIGI.

Bloomberg as an LEI LOU: Bloomberg does not understand CUSIP's assertion how "These concerns are exacerbated by Bloomberg also being one of the largest LEI Issuing Organizations within the Global LEI System and generating tens of millions of dollars assigning and certifying LEIs, a business that would expand exponentially if the Proposal were finalized as drafted." [88] While it is unclear how Bloomberg as an LOU (LEI issuing organization) would expand with the FIGI as the joint standard, even if it did, revenue is not profit and GLEIF LEI LOUs operate on a strict demonstrable cost-recovery basis. [89] CUSIP (CGS) acts as a registration

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[84] *See* Bloomberg Letter at 38.

[85] *See* Bloomberg Letter at 16.

[86] *See* Letters from the S&P Global, at 2, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-535156-1534963.pdf, National Association of Health and Educational Facilities Finance Authorities, at 3, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-533655-1530042.pdf and IIA Letter.

[87] *See* CUSIP Letter at 9.

[88] *See* CUSIP Letter at 9.

[89] *See* GLEIF, "Annual Accreditation Verification Requirements", Appendix 10, (November 5, 2022), at 2, "The

agent for WM Daten, an ANNA member, where WM Daten is also an issuer of LEIs. Firms can request LEIs from the CUSIP website where WM Daten will fulfill the request.

Each year, LOUs engage in a re-accreditation process to ensure they still have the capabilities to operate in the LEI space. As part of that re-accreditation, each LOU must submit an audited cost recovery model to ensure no profit is being generated. The GLEIF also signs off on the report to ensure all its principles are being adhered to. If it is deemed the cost recovery model principles are not met, then the price of the LEI, either new issuance or renewals, must be adjusted to reflect compliance.

Moreover, Bloomberg is just one of 38 LOUs globally and just one of 13 LOUs that operate in the U.S. jurisdiction (Figure 8). When Bloomberg entered the market for LEI issuance in 2017, the incumbent LOUs charged as much as $220 per new LEI issued. Bloomberg initially charged $75 per LEI requested. This low entry fee forced the incumbents to reduce their prices by half. Due to efficiencies created overtime, Bloomberg now charges only $60 for a new LEI request making Bloomberg one of the most economical issuers of LEIs.

LOU will be required annually to confirm and demonstrate its compliance with the ***cost recovery*** model" (emphasis added), available at https://www.gleif.org/media/pages/about-lei/the-lifecycle-of-a-lei-issuer/gleif-accreditation-of-lei-issuers/required-documents/c27d50e69b-1734440468/2022-05-11_ma-appendix-10-accreditation-verification_1.4final.pdf.

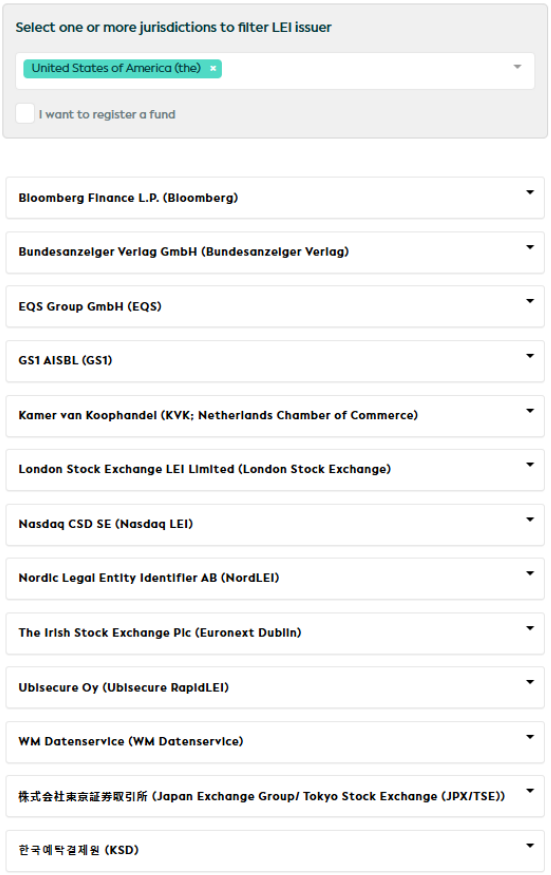


Figure 8. LEI Local Operating Units in the U.S. [90]

The FIGI model enables users (e.g., the Agencies) to attain an open-source identifier and descriptive data and then with that identifier in place market data vendors can be **in competition** for the additional data that they need (if any is needed). In such a competition, FactSet's CGS (CUSIP) could either become or remain that vendor. [91]

The Agencies' Chief Data Officers have the obligation under the Foundations for Evidence-Based Policymaking Act of 2018 to establish a data management ***strategy*** that provides them with the optionality to place private (data vendor) enterprises in competition for their data needs to be effective stewards of the public's money. [92] This is among the reasons why the

[90] *See* GLEIF, "Get an LEI: Find LEI Issuing Organizations", *available at* https://www.gleif.org/en/about-lei/get-an-lei-find-lei-issuing-organizations.

[91] *See* CUSIP Letter at 8, argues incorrectly that "Rather, much of the valuable data associated with a FIGI requires a Bloomberg subscription to a specific Bloomberg commercial service or a subscription to another data vendor's data feed."

[92] Obtaining data necessary for identifying an instrument from an open source while opening up competition for additional data would likely be a better utilization of resources than currently exists. By separating the mandatory identifier from the data packages, the Agencies will be able to effectively manage their data requirements and budget. The Agencies will have the ability to make a choice among 135 global data providers.

FDTA requires the identifier and its supporting identification data elements to be "open-source" (e.g., free). With over 135 data vendors worldwide including FIGI as a security identifier option in their offering and a mix of companies that use FIGI to provide services and others that map FIGI to other identifiers, it is clear that ***the FIGI framework does not force reliance or adoption of a single market data vendor's product, including Bloomberg.*** [93]

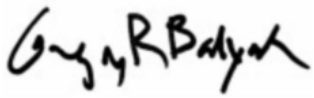
Moreover, comments that "the Agencies failed to consider the cost to market participants to render FIGI useful"[94] is a Phase II consideration. It is the same argument rejected by FINRA in the context of FINRA's decision to maintain their symbol-creation service in a Proposed Rule Change to Expand TRACE Reporting Requirements to Trades in U.S. Dollar-Denominated Foreign Sovereign Debt Securities. [95]

Comment File.

On November 25, 2024 the ABA submitted a supplemental comment letter "providing an analysis with respect to the comment file with respect to the proposal….". The excerpts where not entirely representative of the range of submissions. While Bloomberg is comfortable that the Agencies are familiar with the comment file, we've attached a concise range of comments not captured by the ABA's submission. (see Appendix 6).

Conclusion.

We appreciate the opportunity to respond to this Proposal, and the opportunity to provide additional material data and analysis on this important initiative. Bloomberg would be pleased to respond to any questions the Commission may have.



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Global Head of Regulatory Affairs, Bloomberg L.P.

Gary Stone
Regulatory Analyst and Market Structure Strategist, Bloomberg L.P.

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[93] *See* Bloomberg Letter at 16.

[94] *See* ABA Letter at 26.

[95] *See* FINRA Response to Comments on Proposed Rule Change to Expand TRACE Reporting Requirements to Trades in U.S. Dollar-Denominated Foreign Sovereign Debt Securities, File No. SR-FINRA-2022-011 (Aug. 1, 2022), at 3, *available at* https://www.finra.org/sites/default/files/2022-08/SR-FINRA-2022-011-response-to-comments-8-1-2022.pdf.

Appendix 1. FIGI as a Data Management Solution.

Some specific case studies include:

BMLL Technologies

available at https://assets.bwbx.io/documents/users/iqjWHBFdfxIU/rjJ4SVFJ_tDE/v0.

Case study

BMLL Technologies Ltd.

Firm profile

London-based BMLL Technologies Ltd is a data analytics platform for quantitative analysis of the historical limit order book data from a broad range of exchanges and other data sources. The firm provides coverage of global markets with a focus on equities, futures and options. BMLL is seeing strong customer demand and expects to increase the headcount to 50 employees by the end of 2018.

Business challenge

It is essential to have a common identifier across all asset classes which is widely used and recognised by the entire client base of BMLL. If they could not offer this, BMLL would need to create proprietary identifiers, adding an additional layer of complexity when mapping multiple third-party identifiers.

As a high-volume data analytics provider on historical limit order book data, the company faced the significant challenge of consuming vast amounts of data from disparate sources and mapping it to common identifiers. Sometimes data owners use their own proprietary codes or a mix of more commonly identifiable codes (ISINs) – so the BMLL analysts have to combine these with other metadata fields, including MIC Codes and currency in order to map to unique, common and easily interpretable identifiers.

However, they did not want to rely on identifiers that require license fees. In summary, the BMLL data scientists were looking for a common identifier with broad coverage and no license requirements or limitations.

Solution

The fintech firm found a solution in Financial Instrument Global Identifier (FIGI): it enabled them to manage identification of financial instruments far more easily than if they were to attempt a project of this magnitude themselves, especially as the uptake of firms using FIGIs has seen strong growth in the last 12-24 months.

The company chose FIGI specifically as this identifier met their requirements as a global open-data standard with wide coverage across asset classes. The hierarchy of FIGIs has helped them to map fungible securities at the Share Class level (ID_BB_GLOBAL_SHARECLASS) to the specific FIGIs that have exchange- and currency-level granularity (ID_BB_GLOBAL); the firm analysts found that these characteristics were essential when mapping a complex universe of securities across many different venues. The BMLL analysts believe that these features make FIGI better than other open-source identifiers.

The allocation of a unique FIGI to every individual tradable instrument was also critical. The breadth of coverage of asset classes, exchanges, derivatives and regions ensured that BMLL had the full coverage they needed. The open nature of the FIGI standard allowed for straightforward integration at a development level as well as ongoing updates, additions and deletions.

BMLL equally highlighted the intuitive and powerful API provided on the website www.OpenFIGI.com; this API enabled them to map hundreds of thousands of securities without the limitations commonly associated with other methods of mapping this data (e.g., financial terminals and Excel APIs).

Finally, BMLL enjoyed having technical support from the Open Symbology team in London and found it useful during their adoption process.

They mentioned that the mapping itself required some rudimentary knowledge of some systems and coding, but the effort put in has saved the firm significant time and resources. The alternative was committing to doing something similar.

Results

The benefits of implementing FIGI as the primary instrument identifier across asset classes were felt equally internally and externally; BMLL could decrease the cost of reference data management while ensuring the high quality of data. The open nature of the FIGI standard allows the BMLL clients to access FIGIs and Bloomberg tickers so they can easily combine data from BMLL with their own proprietary data. In addition, using the FIGI as the identifier, the fintech firm can immediately access all other Bloomberg services on a paid-for basis. The integration of FIGI symbology with Bloomberg enables BMLL to easily query specific data and thus quickly and easily access critical data points.

Note: The "ticker" reference refers to creating an accurate security description containing metadata for the issuer, coupon, type of coupon (e.g., Floating) and the bond "type" (e.g., medium term note (MTN)) and maturity date.

Pluribus Labs LLC
available at https://assets.bwbx.io/documents/users/iqjWHBFdfxIU/r4Kl2yaEZ714/v0.

Case study

Pluribus Labs LLC

Overview

Headquarters: San Francisco, CA

Company profile:

- A small FinTech company with 10 members. A diverse group of quantitative researchers, scientists and technologists with deep experience in institutional investment.
- Geographic market is worldwide, from Japan to the U.S.

Business situation

Understanding price movements in markets requires vigilance across an ever-increasing number of sources. However, quickly extracting valuable and usable information from thousands of disparate conversations is not easy. Pluribus Labs' team of data scientists, quantitative analysts, engineers and financial professionals employ a rigorous process to extract insights from the most relevant social media conversations to deliver these predictive analytics to their clients via a real-time streaming API. Keeping these sentiments linked to the correct company is extremely important.

Challenge

Pluribus Labs' data sources for the U.S. Market include social media platforms and traditional media outlets. The company extracts sentiment related to publicly traded companies from the data. Given that the company operates globally, people tend to mention the ticker of a given company in a local region, which makes it tricky to determine with a good amount of certainty what company is being referenced. An example: MSFT in the U.S. is Microsoft Corp; in Jordan, MSFT is Masafat for Specialized Transportation. Accordingly, attempting to aggregate sentiments by ticker would be extremely risky. Pluribus had been trying to create its own identifiers and mapping protocol, using different levels and a hierarchy that would roll up to an asset class identifier. However, this proved to require a lot of maintenance on the company's side. Quality was also at risk — like anything related to homegrown ID mapping, a lot of human capital is required to address edge cases and to spot-check. The risk is always a wrong mapping, which would jeopardize the accuracy of the company's products. The firm continued to look for a better solution to aggregate its data.

Solution

Once Pluribus Labs became aware of the Financial Instrument Global Identifier (FIGI) that is available free of charge with no material impediments on use, it immediately began researching to see if this could answer the firm's need for reliable identifiers. The structure of the FIGI and its uniqueness made it compelling compared with other proprietary identifiers. That no cost was involved made the initial integration decision easier.

Using the documentation and instructions found on openfigi.com, Pluribus Labs' team began using the OpenFIGI API to begin mapping. The straightforward process and ease of use allowed the company to forgo any assistance from Bloomberg's Symbolog team. The effort expended by the firm was very little, requiring only one member to be assigned to this task. Pluribus began extracting multiple levels of FIGI for equities, including the Share Class FIGI, which helped to simplify the process of isolating companies being mentioned on social media around the world.

Results

Once FIGI was fully integrated into Pluribus Labs' system, the company began realizing benefits immediately. For example, the company no longer needed to dedicate resources to internal mapping, freeing up a considerable amount of time and thus allowing greater focus on its core business offerings. The FIGI structure and its key qualities, such as uniqueness and the fact that it never changes, made it a perfect choice for aggregation of data. The FIGI simplified the process of isolating companies with certainty at the global level of social media discussion. While the benefits to the company are mainly internal, Pluribus Labs' clients also gain from knowing that the firm will deliver accurate sentiment analytics.

Exchange Data International Limited,
available at https://assets.bwbx.io/documents/users/iqjWHBFdfxIU/rG4oHcu_ziw4/v0.

EXCHANGE DATA INTERNATIONAL LIMITED

OVERVIEW

Headquarters:
London, United Kingdom

Offices:
New York, India, Morocco

CUSTOMER PROFILE

- Founded in 1994
- Leading expert in corporate actions and reference data

BUSINESS SITUATION

With more than 20 years of experience, EDI offers comprehensive and complete securities reference data for equities and fixed income instruments around the globe. As a participant in a dynamic industry, EDI prides itself on its flexibility in providing financial institutions with specialized business solutions that fulfill their requirements. Therefore, when clients were in need of an open-source identifier that could be used freely for mapping and to help reduce fees incurred by other numbering systems, EDI quickly began looking for a solution.

Exchange Data International Limited (EDI) has been helping the global financial community make informed decisions for more than 20 years, delivering high-quality securities reference data, corporate actions and end-of-day pricing services. EDI provides corporate actions for 170 exchanges worldwide and covers equities, corporate and government bonds, and derivatives. The company has expanded over the years and now employs 400 people, with sales offices in London and New York.

EDI began integrating Open Symbology in 2011 to meet the needs of its clients. The Financial Instrument Global Identifier (FIGI), included in the Open Symbology, is an established global standard of the Object Management Group (OMG.org, an international nonprofit technology standards consortium)[1].The OMG FIGI standard is issued and distributed by Bloomberg L.P. as a Registration Authority.

CHALLENGE

As part of its reference data and corporate actions products, EDI delivers third-party instrument identifiers such as SEDOLs, ISINs and CUSIPs. However, these proprietary identifiers incur licensing fees and have redistribution restrictions. With Bloomberg's launch of Open Symbology in 2010, clients became interested in mapping to an open-sourced identifier through EDI's product offerings. Many of EDI's clients, Bloomberg clients also, were eager to use the FIGI to match their holdings with the instruments on the Bloomberg Terminal®, Data License and other Enterprise Solutions products. Clients were also struggling with proper exchange/venue-level identification, which other proprietary identifiers do not offer natively, because they do not utilize a metadata approach.

SOLUTION

In response to client demand, EDI began working with the Open Symbology team in 2011 to start the FIGI implementation process. EDI's database operations team set up a project group comprising data and IT personnel to map, verify and load the symbology within their instrument-coding matrix. The initial FIGI mapping was done with the assistance of the Open Symbology team, who worked closely with EDI's data and technical teams. FIGI symbology was phased in to EDI's reference database over one and a half years. EDI now receives daily FIGI files from the Open Symbology team. The OpenFIGI API is also used on a weekly basis to conduct additional mapping. Any exceptions or missing data are then sent to the Open Symbology team for further verification. This is all performed as a fee-free service in support of the FIGI standard.

RESULTS

The integration of the FIGI into EDI's system helped the firm resolve some ambiguity in its data by use of a unique, non-changing identifier. These benefits were realized throughout the firm, since FIGI use can easily be extended across business areas without licensing requirements. The FIGI has also enhanced EDI's product offerings, which clients have found to be exceptionally helpful. For example, EDI can now offer portfolio feeds to its clients based on FIGI codes. EDI is also now able to deliver FIGI as an alternative symbology to its clients, eliminating the need to maintain licenses for proprietary identifiers. Recently, EDI onboarded new clients who have specifically requested the FIGI as their primary means for instrument identification. FIGI's granularity for equities allows EDI's clients to identify instruments at an exchange level–helpful for maintaining and storing accurate pricing data.

After EDI's initial integration of FIGI, the firm continues to receive client demand for further expansion of FIGI use within its product offerings. In December 2016, EDI included FIGI codes in Version 2 of its Worldwide Adjustment Factor Feed[2].

As an open data standard, the OMG FIGI allows data vendors, such as EDI, to make available more robust product offerings to its clients at no additional cost. Because of the metadata approach of the FIGI methodology, vendors and clients are able to extend the metadata set with their own data. EDI joins a list of more than 150 vendors and third parties that have integrated the FIGI and are further distributing it, which aids the financial community in breaking through the complexities of instrument identification via use of a unique identifier across all asset classes.

Since this case study was documented, EDI has migrated from consuming daily files to the OpenFIGI.com API. Nevertheless, the EDI case study is very similar to the Agencies. As also noted in the Bloomberg Letter at 28, "Any exceptions or missing data are then sent to the Open Symbology team for further verification."

Appendix 2. The 13F Experience.

Several commenters conducted an analysis of voluntary position reporting using the FIGI identifier in SEC Form 13F filings [96] to support "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." [97]

Since Q1 2023, investment advisors have had the option to voluntarily report a FIGI with the mandatory CUSIP identifier. Dr. Lewis' research explained 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." While trying to frame that the "uptake of FIGI reporting has been relatively stable since the introduction of the optional FIGI field in early 2023" as a negative, the fact that on average 12-13% are voluntarily reporting using a FIGI and a CUSIP when it isn't mandated to do so is actually astounding.

Moreover, Dr. Lewis found that:

- 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.
- 12.0% of the fifty largest managers reported using FIGIs
- Among the smallest 1,000 institutional managers, 4.3% included a FIGI in their Form 13F filings;
- Less than 1% for the smallest 500 filers.

In short, the data shows that the mid-sized and some of the smaller institutional managers were motivated to report using a FIGI. [98]

Dr. Craig M. Lewis' analysis coalesces around two major areas: misreporting which appear to be a result of data entry errors; and submitters reporting the lower-level FIGI hierarchy rather than the share class. While these errors are being used as examples that should give the Agencies and the industry "great concern", the reality is that there are similar user errors in the 13F reports using the CUSIP as the incumbent primary reporting identifier. User error does not make an identifier inadequate for the Agencies' use case.

Dr. Lewis' found one instance where a reported FIGI could not be identified in an OpenFIGI.com search of the database[99] and invalid FIGIs were reported "reflecting apparent

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[96] *See* ABA Letter, Craig M. Lewis, PhD., Appendix 1, at 91, and CUSIP Letter, at 6 and Appendix B at 16.

[97] *See* ABA Letter, Craig M. Lewis, PhD, Appendix 1, Paragraph 3, at 92. Also see similar "market confusion" concerns in the CUSIP Letter at 11, FN 28.

[98] Bloomberg believes that the 13F experience demonstrates the motivation of mid and smaller entities to have an alternative and at the same time also agrees with the Investment Advisor Association (at 11) that "In the second phase of rulemaking, each Agency should consider the costs and impacts of choosing either FIGI or CUSIP on smaller entities, and, if a common identifier other than CUSIP is ultimately adopted, each Agency should provide an ample transition period."

[99] *See* ABA Letter, Craig M. Lewis, PhD, Appendix 1, Paragraph 14, at 95.

data entry errors." [100] Dr. Lewis' analysis illustrates that submitters do make reporting errors. But that doesn't mean that there is a fundamental problem with the identifier's usability, as he suggests. While an education issue may exist for instructing 13F filers about which FIGI in the data model to use for 13F reporting, Bloomberg's analysis of the 13F reports suggests that a similar education is also needed regarding CUSIP selection for equity options and equities after a corporate action.

CUSIP is over 60 years old and has been the primary financial security identifier in 13F reports since the rule was adopted in 1975. Despite this history and commenter's assurances that CUSIP provides accuracy, stability, clarity, the analysis of the 13F reports submitted in the Q3 2024 reporting period [101] show that there were some instances of filers submitting incorrect CUSIPs. Many of those errors occurred with equity options reporting.

13F rules explain that 13F option securities should be reported using the underlying's CUSIP – not the option's CUSIP. 16.57% of equity options were reported using what appears to be a "dummy CUSIP". [102] Dummy CUSIPs are referred to as the CUSIP numbers that are reserved for CUSIP users to "test" or "create" CUSIPs for securities that do not actually have a CUSIP. Issue Numbers 90 through 99 in the equity group, and 9A through 9Y in the fixed income group, are reserved for the user specifically for assignment to those issues of an eligible issuer where no CUSIP issue number has been assigned. Although the underlying CUSIP should have been reported, it appears that the dummy CUSIPs were used when the equity option did not have an assigned CUSIP. This is clearly a case of the filer's error, and a certain amount of education is needed to clarify how to report 13F option securities using CUSIP – a similar education is needed to clarify to report share class FIGI in equities.

In equities, there are instances where users continue to report using the old CUSIP – the identifier prior to a corporate action. [103] This is a hard error to remedy. By contrast, rectifying errors surrounding submitters not using share class FIGIs is easily remedied either by education of the filer or by the regulator utilizing the FIGI data models capacity to roll-up FIGIs to the share class level.

Dr. Lewis' analysis cites Linde PLC as an example of FIGI "confusion" corrupting the usability of the 13F reports noting, "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)." [104] He goes on to note, "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

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[100] *See* ABA Letter, Craig M. Lewis, PhD, Appendix 1, Paragraph 17, at 95-96.

[101] Reports through August 15, 2024.

[102] For example, in the Q3 2024 reports 16.57% of equity options were reported using what appears to be a "dummy CUSIP". For example, dummy CUSIPs were used for several strikes in 10X Geneomics, 180 Degree Cap Corp, 3M, Abbott Labs, A10 Networks, and others.

[103] For example, in Q3 2024, ADITXT Inc, Ashford Hospitality TR Inc, DBV Technologies, Nutex Health and others.

[104] *See* ABA Letter, Craig M. Lewis, PhD, Appendix 1, Paragraph 18, at 96.

report, one aspect that may lead to confusion are corporate actions." [105] Bloomberg agrees with Dr. Lewis' corporate actions confusion concerns, but in the CUSIP context – CUSIP's corporate actions methodology and the introduction of "CUSIP Permanence" are well suited for execution, settlement, and clearance rather than data management. The Q3 2024 data confirms this.

In March 2023, Linde PLC completed an intercompany reorganization that involved the creation of a new holding company. Dr. Lewis finds, "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)." [106] For Linde PLC, in the Q3 2024 period, in over 6% of the reports, filers reported with the old CINS. Linde had been delisted in Canada on March 2, 2023, resulting in the CINS becoming inactive. Submitters also used the old-CUSIP after the corporate action.

Linde is not an isolated example. There are other examples where the old CUSIPs are being reported, perhaps because filers were not aware of a corporate action that engendered a CUSIP change. For example, ADITXT CUSIP changed multiple times on reverse stock splits on September 14, 2022, August 18, 2023, and October 2, 2024. It isn't a surprise that with 4 CUSIPs in four years, over 50% of the time in the Q3 2023 reporting period, the incorrect CUSIP was used. Ashford Hospitality TR INC changed CUSIP three times in four years – and over 25% of the reports in Q3 2024 used an old CUSIP. Yet another CUSIP change was made effective on October 28, 2024. The same corporate action story is replayed in DBV TECHNOLOGIES S A, and Nurtex Health Inc.

Dr. Lewis' analysis found that 91.25% reported the correct share class FIGI for the SDPR S&P 500 ETF. Among the errors in the remaining 8.7% percent included errors where unrelated instruments or non-existent FIGIs were reported. The majority of errors were in the reporting of the composite (country) and the exchange-level FIGIs – these are not catastrophic as those FIGIs can be rolled up to share class – and reporting the FIGI for the SDPR S&P 500 ETF option rather than the FIGI for the underlying (again not a catastrophic error like reporting a dummy CUSIP).

[105] *Id*.

[106] *Id*.

Appendix 3: The FIGI Allocation Rules Identify the Appropriate FIGI to use.

The hierarchy and appropriate FIGI identifier is defined in the "Allocation Rules for The Financial Instrument Global Identifier (FIGI) Standard." [107] This Appendix shows which OpenFIGI.com search column results and OpenFIGI API fields that correspond to the appropriate identifiers. As noted above, some commenters suggested that "FIGI is a complex and diffuse identification system" that will increase regulatory reporting error rates. [108] While Bloomberg strongly disagrees, this is a topic that falls within Phase 2 of the FDTA implementation process. Needless to say, if FIGI were complex and a threat to increase errors, its hard to imagine why there would be 235 billion security download requests for FIGI over less than two years.

FIGI Allocation Rules: In cases where a fungible identifier is required, users should apply the highest level of FIGI assignment for each asset class as follows:

The FIGI field on OpenFIGI (and ID_BB_GLOBAL in the OpenFIGI API) is the highest level of assignment, or the fungible identifier for the following asset classes. This is the instrument-level identifier on par with other market identifiers:

- Corporate Bonds
- Preferreds
- Loans
- Money Markets
- Governments
- Mortgages
- Municipal Bonds
- Equity Futures
- Non-Equity Futures & Options
- FX Options
- FX & Crypto Currencies
- Index
- Equity Options (except for those listed in Japan, China, Canada, and United States)
- Index Options (except for those listed in the United States)

FIGI	Name	Ticker	Exchange Code	Security Type	Market Sector
Filter	Filter	Filter	Filter	Filter	Filter
BBG00052GY25	IBM CORP	IBM 5.07 03/22/00 MTN		DOMESTIC MTN	Corp
BBG00RMPYK80	IBM CORP	IBM 1.2 02/11/40	NEW YORK	EURO NON-DOLLAR	Corp
BBG0005748M2	IBM CORP	IBM F 07/28/00 MTN		DOMESTIC MTN	Corp

[107] *See* Object Management Group, "Allocation Rules for The Financial Instrument Global Identifier (FIG) Standard", Version 29.9, (July 2022), *available at* https://www.openfigi.com/assets/local/figi-allocation-rules.pdf.

[108] *See* ABA Letter, at 20 and Craig M. Lewis, PhD., Paragraph 27 at 75, Paragraphs 2 and 3 at Page 91. "Although these different FIGIs ultimately refer to the same security, they refer to the security in a specific context. 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."

The FIGI Composite field on OpenFIGI (and COMPOSITE_ID_BB_GLOBAL in the OpenFIGI API) is the highest level of assignment, or the fungible identifier for the following asset classes. This is the FIGI that is the fungible ID across all of the U.S. option exchanges. The FIGI (and ID_BB_GLOBAL in the OpenFIGI API) is the specific option identifier:

- Warrants
- Equity Options listed in Japan, China, Canada, and United States
- Index Options listed in the United States

FIGI	Name	Ticker	Exchange Code	Security Type	Market Sector	FIGI Composite	Share Class
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
BBG00V8M20B9	July 20 Puts on IBM US	IBM 07/24/20 P131	UG	Equity Option	Equity	BBG00V8M1ZD1	
BBG012N8FQW2	October 21 Calls on IBM US	IBM 10/08/21 C85	UF	Equity Option	Equity	BBG012N8FQC4	
BBG01B1PN8C1	March 23 Puts on IBM US	IBM 03/17/23 P60	UL	Equity Option	Equity	BBG01B1PN831	

The Share Class (global) FIGI field on OpenFIGI (and ID_BB_GLOBAL_SHARE_CLASS in the OpenFIGI API) is the highest level of assignment, or the fungible identifier for asset classes listed below. The Composite FIGIs (and COMPOSITE_ID_BB_GLOBAL in the OpenFIGI API) aggregates by country. The FIGI (and ID_BB_GLOBAL in the OpenFIGI API) identifies the specific exchange-level security identifier.

As a data management tool, FIGI(s) roll up to Composite (country) FIGI(s) and the Composite (country) FIGI(s) roll-up to the Share Class FIGI (Figure A).

- Equities
- Funds

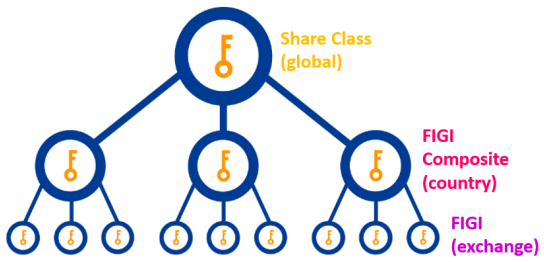
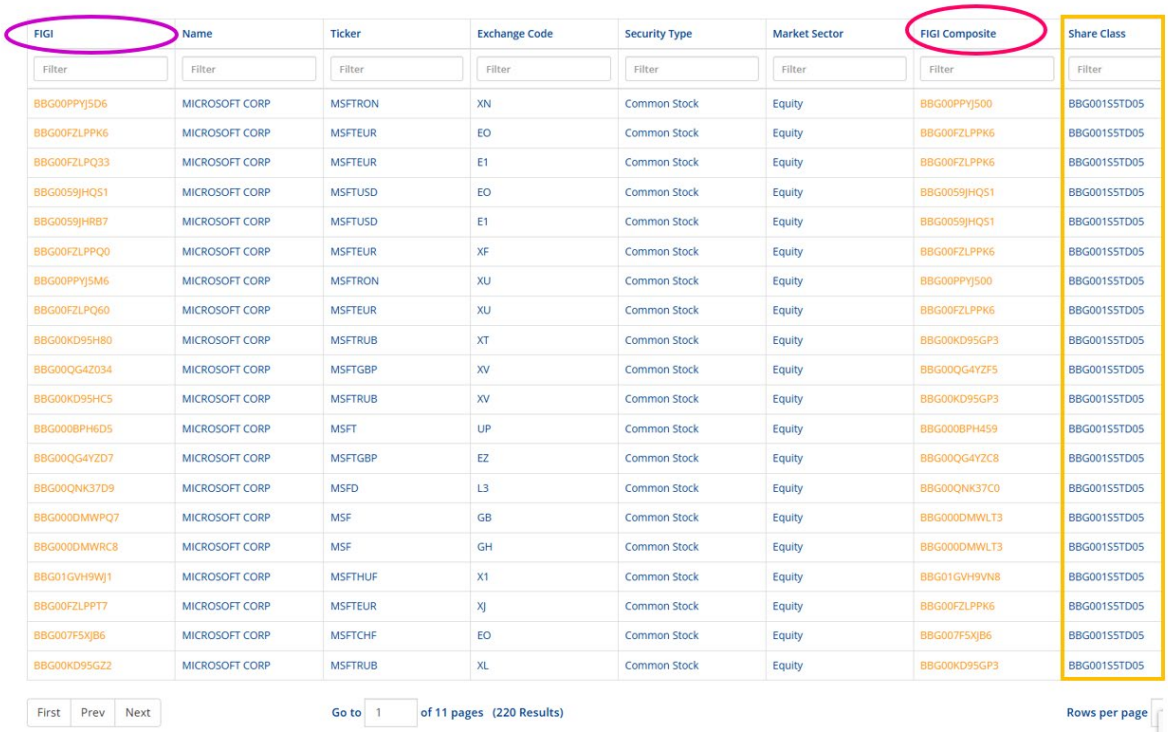


Figure A: Equity Hierarchy



FIGI	Name	Ticker	Exchange Code	Security Type	Market Sector	FIGI Composite	Share Class
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
BBG00PPYJ5D6	MICROSOFT CORP	MSFTRON	XN	Common Stock	Equity	BBG00PPYJ500	BBG001S5TD05
BBG00FZLPPK6	MICROSOFT CORP	MSFTEUR	EO	Common Stock	Equity	BBG00FZLPPK6	BBG001S5TD05
BBG00FZLPQ33	MICROSOFT CORP	MSFTEUR	E1	Common Stock	Equity	BBG00FZLPPK6	BBG001S5TD05
BBG0059JHQS1	MICROSOFT CORP	MSFTUSD	EO	Common Stock	Equity	BBG0059JHQS1	BBG001S5TD05
BBG0059JHRB7	MICROSOFT CORP	MSFTUSD	E1	Common Stock	Equity	BBG0059JHQS1	BBG001S5TD05
BBG00FZLPPQ0	MICROSOFT CORP	MSFTEUR	XF	Common Stock	Equity	BBG00FZLPPK6	BBG001S5TD05
BBG00PPYJ5M6	MICROSOFT CORP	MSFTRON	XU	Common Stock	Equity	BBG00PPYJ500	BBG001S5TD05
BBG00FZLPQ60	MICROSOFT CORP	MSFTEUR	XU	Common Stock	Equity	BBG00FZLPPK6	BBG001S5TD05
BBG00KD95H80	MICROSOFT CORP	MSFTRUB	XT	Common Stock	Equity	BBG00KD95GP3	BBG001S5TD05
BBG00QG4Z034	MICROSOFT CORP	MSFTGBP	XV	Common Stock	Equity	BBG00QG4YZF5	BBG001S5TD05
BBG00KD95HC5	MICROSOFT CORP	MSFTRUB	XV	Common Stock	Equity	BBG00KD95GP3	BBG001S5TD05
BBG000BPH6D5	MICROSOFT CORP	MSFT	UP	Common Stock	Equity	BBG000BPH459	BBG001S5TD05
BBG00QG4YZD7	MICROSOFT CORP	MSFTGBP	EZ	Common Stock	Equity	BBG00QG4YZC8	BBG001S5TD05
BBG00QNK37D9	MICROSOFT CORP	MSFD	L3	Common Stock	Equity	BBG00QNK37C0	BBG001S5TD05
BBG000DMWPQ7	MICROSOFT CORP	MSF	GB	Common Stock	Equity	BBG000DMWLT3	BBG001S5TD05
BBG000DMWRC8	MICROSOFT CORP	MSF	GH	Common Stock	Equity	BBG000DMWLT3	BBG001S5TD05
BBG01GVH9WJ1	MICROSOFT CORP	MSFTHUF	X1	Common Stock	Equity	BBG01GVH9VN8	BBG001S5TD05
BBG00FZLPPT7	MICROSOFT CORP	MSFTEUR	XJ	Common Stock	Equity	BBG00FZLPPK6	BBG001S5TD05
BBG007F5XJB6	MICROSOFT CORP	MSFTCHF	EO	Common Stock	Equity	BBG007F5XJB6	BBG001S5TD05
BBG00KD95GZ2	MICROSOFT CORP	MSFTRUB	XL	Common Stock	Equity	BBG00KD95GP3	BBG001S5TD05

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Figure B: Microsoft.

Even without the above explanations, the existence, or not, of a hierarchy existing for any particular instrument or asset class is automatically presented in the open-source metadata itself. That is to say, if a user has a FIGI, and the metadata for that FIGI contains a Composite and a Share Class FIGI, the ‘level’ of that FIGI is immediately apparent, even ignoring the associated metadata that would contain an exchange, market sector or other data.

Appendix 4: ISIN Provides Similar Information as OpenFIGI to Identify a Security.

Each identifier standard includes a list of the minimum amount of "mandatory" data elements. Data elements are very different than providing a data model and FIGI and SEDOL are the only global publicly available specifications (standards) for financial instrument identification that incorporates a data model.

CUSIP: According to the CUSIP standard, only three fields (the CUSIP number assigned, the issuer name in standard abbreviated form, and the issue name in standard abbreviated form) are required by the standard itself. The standard does provide for additional data elements to be provided, but they are not REQUIRED, and thus do not need to be provided according to the text of the standard itself. In Appendix D of the Bloomberg Letter, a side-by-side comparison is made illustrating that, based on the standard specifications, alone, the FIGI standard provides significantly more data fields as required elements to be included with the standard.

The ISIN 6166 standard specifies the ISIN mandatory fields – they are remarkably similar to the FIGI standard's key data elements and the data that is available on OpenFIGI. [109]

Data Accessibility: As an initial matter, the Derivatives Service Bureau ("ANNA DSB") offers an open-source OTC-ISIN API, but that is specific to just OTC Derivatives, is not real time, and requires users to register. This also ignores the DSB itself is industry funded at a cost of over $6MM per annum for real time users. For non-OTC ISINs, ANNA, the owner of ISIN, consolidates all the local national numbering agencies identifiers into an ISIN file. ANNA offer this (consolidated) ISIN file with the associated data included in the standard documentation for ISO 6166 only periodically and through a subscription.

In contrast, OpenFIGI.com offers an open-source, searchable dataset, as well as an API for machine accessibility. While the service is still without charge on a non-discriminatory basis, OpenFIGI API users are required to register mainly for security purposes and so that the operators have a contact to help optimize bulk-request usage. OpenFIGI does not limit downloads or API requests – it only places restrictions on requests per minute for load-stabilization – so that each requester has the same access and response experience.

[109] Unlike OpenFIGI.com, the "Free ISIN Lookup Service" requires potential users to register and be approved to perform any search. Access is gated - only a limited number of records can be downloaded. While the service is still without charge, OpenFIGI API users are required to register mainly for security purposes and so that the operators have a contact to help optimize bulk-request usage. OpenFIGI does not limit downloads or API requests – it only places restrictions on requests per minute for load-stabilization – so that each requester has the same access and response experience.

ISIN Mandatory Fields:

ISIN	Description	Status	Comment	FIGI	Description	Comment
ISIN Identifier	The 12 character ISIN code	Mandatory		FIGI Identifier	12 charcter code for the instrument	
Issuer Legal Name	Issuer of instrument	Mandatory		Financial Instrument Name	Issuing company and may include brief description of the security	
FISN (ISO 18774)	Short name representation of Issue Descripton	Mandatory				FISN is an ISO format distributed by ANNA and subject to redistribution restrictions
Issue Description	Long' version of issue description	Mandatory		Security Description	Description of the security	
				Exchange Code	Exchange or jurisdiction of the financial instrument, if applicable	A separate file is provided to map this code to a MIC, if available. MICs are not available for such things as OTC, unlisted,
				Ticker	Parsekey type description reflecting common usage, including rates, maturity date, other relevant common usage data	
				Pricing Source	Where the primary pricing is not an exchange	
CFI (ISO 10962)		Mandatory		Market Sector	Aspect of security type defining asset category broadly	Market Sector and Security Type roughly aligns with the two top levels of CFI. CFI is only 'official' if distributed by ANNA and lower levels are subjective to the NNA's assignment
				Security Type	More specific type description within a Market Sector	
				Security Type 2	Provides any additional clarity to Security Type	
				Composite	This represents the identifier that aggregates financial instruments within an appropriate context. For example, this would aggregate a set of equity global identifiers within a country, or act as the aggregate level for currency and cryptocurrency pairs.	
				Share Class	A Share Class Global Identifier is assigned so as to represent an aggregate of Composite Global Identifiers. This class may be only applicable to some securities. For example, for currency and cryptocurrency, Share Class may refer to a currency within its own context – that is without relative value or relationship to another currency or financial instrument	

ISIN Conditional Fields:

ISIN	Description	Status	Comment	FIGI	Description	Comment
Issuer LEI (ISO 17442)		Conditional				
Head office name (only applicable for branch issuances)		Conditional				
Head office LEI (only applicable for branch issuances)		Conditional				
Nominal Value		Conditional				
Currency (ISO 4217)	typically provided based on country of issuance	Conditional			Will differ based on various factors, such as exchange or jurisdiction	Currency is not part of the standard, but can be used as a search element
Interest		Conditional		Ticker or Description		Included in ticker and/or description
Maturity (ISO 8601 series)		Conditional		Ticker or Description		Included in ticker and/or description
Strike		Conditional	Typically not provided as discrete field and only in description	Ticker or Description		Included in ticker and/or description
Call/put		Conditional	Typically not provided as discrete field and only in description	Ticker or Description		Included in ticker and/or description
Underlying Instrument		Conditional	Typically not provided as discrete field and only in description	Share Class and Composite FIGI provided		

Appendix 5: Multiple Acceptable Identifiers: DTCC's FIX/XML Messaging.

This is a Phase II discussion, if at all, but some commenters noted the criticality of CUSIP and ISIN in settlement and clearing. The purpose of this Appendix is simply to observe that DTCC currently maintains a security master database with mappings between different Security IDs – and this is demonstrated in their XML/FIX documentation.

To communicate a security to DTCC for settlement and clearing, the FIX and XML specifications specifies using two fields. The first field, "Tag 22", is the SecurityIDSource – this is the identifier convention (e.g., US – CUSIP, Canada – CINS, UK – SEDOL, ISIN, etc.). The second field, "Tag 48" is the SecurityID – the "value" of the identifier. For example, IBM 7 10/30/2025 is CUSIP 459200AM3 or ISIN US459200AM34. A submitter with a transaction in this bond would format a message using Tag 22 = CUSIP and Tag 48 – 459200AM3 to identify the IBM bond.

DTCC currently provides a broker-dealer submitter with a selection of different identifier schemes when communicating with their broker-dealer system, NSCC. DTCC also provides a selection of different security identification options for Investment Managers to submit their trade-allocations to the CTM system.

Broker-Dealers/NSCC:

DTCC's NSCC (supports) maps to (accepts) five different identification conventions (Figure C). [110] In addition to CUSIP and ISIN, DTCC also supports messages identifying securities with a RIC, "Refinitiv Instrument Code" (Tag 22 = RIC) when messaging NSCC. What is particularly interesting is that RIC is supported without the need for official sector support of a golden copy of RIC and CUSIP (ISIN), as DTCC advocated in its comments for FIGI.

SecurityIDSource (22)

Table A.61 lists the values for the FIX SecurityIDSource (22) tag, which maps to the NumberingAgencyCode XML element. It also indicates the requirements for CountryOfIssue (470) in relation to how you set the SecurityIDSource (22) on inbound messages to CTM.

Table A.61 SecurityIDSource (22) and CountryOfIssue (470)

FIX Value	Description	XML Value	Set CountryOfIssue (470) to:	
			FIX Value	Description
1	CUSIP Number (USA and CA)	CUSI	No value—omit on inbound messages	
2	SEDOL Number (UK)	SEDO		
3	QUIK Number (JP)	QUIC		
4	ISIN (International Security Numbering System)	ISIN		
5	Reuters Number (RIC)	RICN		

Figure C. NSCC (DTCC) Supports Five Identifier Schemas for Broker-Dealers.

[110] *See* DTCC, "CTM FIX 4.4 Interface Message Specification for Broker/Dealers (Current), October 29, 2024, at 363, *available at* https://dtcclearning.com/documents/itp/ctm/technical-resources-3/fix/1858-docman-itp-ctm-mis-dbt-eqt-fix-bd-curr-spec.html

Investment Managers:

DTCC supports the mapping of fourteen conventions (Figure D), [111] including the RIC, when messaging trade-allocation information to CTM. [112]

Table A.45 SecurityIDSource (22)

FIX Value	Description	XML Value	Set CountryOfIssue (470) to:	
			FIX Value	Description
1	CUSIP Number (USA and CA)	CUSI	No value—omit on the J messages	
2	SEDOL Number (UK)	SEDO	No value—omit on the J messages	
3	QUIK Number (JP)	QUIC	No value—omit on the J messages	
4	ISIN (International Security Numbering System)	ISIN	No value—omit on the J messages	
5	Reuters Number (RIC)	RICN	No value—omit on the J messages	
7	ISO country code set in CountryOfIssue (470)	LOCA	Any ISO country code	
A	Other or Bloomberg Symbol	OTHR	No value—omit on the J messages	
B	Wertpapier Kennummer (DE)	WKNN	No value—omit on the J messages	
C	Dutch Number (Netherlands)	LOCA	NL	Netherlands
D	Valoren Number (CH)	VALO	No value—omit on the J messages	
E	Sicovam Number (FR)	SICO	No value—omit on the J messages	
F	Belgian Number (BE)	SVMN	No value—omit on the J messages	
G	Common Code (Euroclear and Cedel)	COMM	No value—omit on the J messages	

Figure D. DTCC Supports 14 Identifier Schemas for Investment Manager Allocations.

What does this mean?

The FDTA does not require Covered Clearing Agencies to accept the joint standard, FIGI, in their systems despite the fact that DTCC is set up already to accept multiple identifiers. This is a further indication that the FDTA is intended to govern the federal government's data, not mandate significant changes in how the private sector conducts its business.

[111] *See* DTCC, "CTM FIX 4.4: FIX Interface Message Specification for Investment Managers (Current)", June 28, 2022 at 194, *available at* https://dtcclearning.com/products-and-services/itp/ctm/2181-technical-resources.html.

[112] In 2022, DTCC migrated and sunset the Institutional Trade Processing systems "OASYS" and "OMEGO" to CTM. See DTCC, "The ITP Story", *available at* https://www.dtcc.com/institutional-trade-processing/itp/hub/evolution-of-itp. *See also*, DTCC, "OASYS Migration Form 2021", *available at* https://www.dtcc.com/~/media/Files/Downloads/DTCC-Connection/OAM-Forum-Recap-Highlights.

Appendix 6. Overview of Comment Letters.

The FDTA rulemaking to establish joint data standards for reporting and sharing data among the financial regulators received more than 100 public comments from a wide variety of stakeholders, including those representing market participants, trade associations, consumer protection advocates, small businesses, academia, state and local governments, and open data and government transparency advocates. While the ABA seeks to paint a picture of widespread opposition to the Proposal[113], a closer examination of the file paints a different picture.

Most of the "opposition" letters highlighted are raising issues regarding Phase II implementation. Bloomberg agrees with many of those commenters – Agency-specific rulemakings should apply the applicable joint standard for collections of information on a case-by-case basis including a demonstration that the benefits outweigh the costs.

The reality is that many commenters concurred that for the Agencies' use case, FIGI is simply a better data management standard than CUSIP. The CUSIP identification scheme works for execution, settlement and clearance within the U.S. securities market, but it is ill suited for the Agencies' data management use case.

Many of the commenters are also supportive of the FDTA's emphasis on selecting an open-source standard because they believe that CUSIP is abusing its government mandate, extracting monopoly rents, and restricting beneficial uses.

This document provides an overview of some common comments made – beyond directly interested parties – regarding the agencies' selection of FIGI as the common identifier for financial instruments under the joint standards.

Congress was right to insist on introducing an open-source identifier to financial reporting regulation.

Many commenters, like the Investment Adviser Association ("IAA"), a not-for-profit organization representing small, medium, and large fiduciary adviser firms that collectively manage more than $35 trillion in assets, recognized "*the importance that a common identifier be nonproprietary or available under an open license to its users.*"[114] IAA further notes:

> *"[The] Agencies should certainly not establish, facilitate, or entrench monopoly power for a provider of identifiers by allowing it to charge commercial prices or control its own pricing and terms."*[115]

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[113] *See* Letter from American Bankers Association, (November 25, 2024), *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-543335-1555402.pdf.

[114] See Letter from Investment Advisor Association at 5, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-532800-1528664.pdf.

[115] *Id*.

> *"Identifiers are simply too vital a public service...no one can access the markets without them, no gatekeeper should be allowed to have unfettered control over that access."* [116]

> *"CUSIP today is far removed from its public service origins."* [117]

The **Enterprise Data Management Council**, a nonprofit industry forum comprised of chief data officers and data professionals from more than 350 global companies that advocates for the development and implementation of data standards, also notes the importance of open-source identifiers:

> *"The 'value' of data dramatically increases when data adheres to universal information standards. Standards adoption will drive clarity, transparency and trust in the data collected. It will enable analysts to perform advanced analytics thru the use of data architecture techniques needed to uncover critical linkages in the data needed to help decision makers make better, more informed decisions. And better decisions based on better data will help the regulatory community achieve its mission to provide safety and soundness in our financial system."* [118]

CUSIP's restrictive terms of use and licensing fees harms investors and stifles innovation.

In their letter to the Agencies, **the court-appointed co-lead counsel for the named Plaintiffs and a proposed class of CUSIP users in an antitrust action** entitled Dinosaur Financial Group, Inc., et al. v. S&P Global, Inc. et al., 22 Civ. 1860 (KPH), pending in the United States District Court for the Southern District of New York since 2022 (the "CUSIP Litigation") noted:

> *"The CUSIP Litigation is the first court challenge … to the licensing program require that virtually all financial institutions, including pension and defined-benefit plans, banks, insurance companies, governmental entities, and academic institutions sign restrictive "license agreements" as a condition to using CUSIP numbers."* [119]

> *"The Defendants exploited the status of the CUSIP identifiers as the standard identifying system for United States financial instruments…"* [120]

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[116] *Id*.

[117] *Id.* at 8.

[118] *See* Letter from Enterprise Data Management Council at 1, *available at* https://www.fhfa.gov/sites/default/files/2024-10/34_EDM_Council.pdf.

[119] *See* Letter from Plaintiff's Counsel, Competition Law Partners PLLC, Wollmuth Maher & Deutsch LLP, and Kaplan Fox & Kilsheimer LLP at 1, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-526315-1509703.pdf.

[120] *Id.* at 2.

> *"The license agreements preclude any unauthorized use, including any commercial use, of CUSIP numbers. This eliminates potential innovation and competition from CUSIP Users, helping to maintain Defendants' 100% share in the CUSIP Use Market."* [121]

> The license agreements have *"stifled competition from start-ups and other potential innovators that could use the CUSIP identifiers to deliver value-added products and services to financial institutions… created a transfer of wealth over the years of billions of dollars from the CUSIP users to Defendants in the form of license fees that CUSIP users otherwise could have used for more productive purposes."* [122]

Other commenters agreed with the Plaintiff's counsel that CUSIP's restrictive terms of use and licensing fees stifle innovation, increase costs to investors and market participants, and impede access to data. For instance, municipal finance researcher **Marc D. Joffe** commented:

> *"The incumbent municipal market identifier, CUSIP, comes with onerous licensing restrictions which greatly complicate the tasks of assembling and analyzing municipal securities data sets…The fact that CUSIPs are restricted is clearly reflected in the terms of use posted on the MSRB's website which users must accept before accessing municipal securities data… MSRB enforces this term (apparently at the insistence of CUSIP Global Services (CGS) and the American Bankers Association (ABA)) by preventing the copying and pasting of individual CUSIP identifiers on its user interface and prohibiting the bulk download of MSRB data."* [123]

> *"These restrictions together with the unavailability of data in machine readable form have prevented the creation of freely available municipal finance data sets beneficial to investors, regulators, and researchers alike"* [124]

Requiring CUSIP for reporting also impacts small businesses and startups. For example, the CEO at FinTech startup, **Blue-Sky Nexus Inc**., wrote:

> *"I am writing in my capacity as the CEO of Blue-Sky Nexus Inc, a fintech with the mission of reducing the cost and complexity of accessing financial and market data for individuals, fintechs, banks, brokers and asset management firms…"* [125]

> *"The CUSIP licensing regime has been a longstanding tax on innovation in our industry, and I welcome the proposed change to switch to the FIGI to address these fundamental*

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[121] *Id*. at 4.

[122] *Id*. at 2.

[123] *See* Letter from Mark Joffe at 1-2, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-523815-1503382.pdf.

[124] *Id.* at 2.

[125] *See* Letter from Blue-Sky at 1, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-528855-1520742.pdf.

and longstanding shortcomings…. Opponents frequently distort the conversation by presenting misleading information or exaggerating the downsides of adopting FIGI, while conveniently overlooking the systemic inefficiencies, fragmentation, and costs plaguing the current system." [126]

Similarly, **LeafHouse**, a registered investment advisor providing investment solutions to retirement plans across the nation, supports the adoption of FIGI because it has seen firsthand the impact proprietary, non-open licensed identifiers like CUSIP have had on investors, including distortions and inaccuracies in data:

"Proprietary identifiers stifle innovation by diverting significant resources toward paying for data that should be universally accessible. By adopting FIGI, the SEC can eliminate these unnecessary costs, allowing funds to be redirected toward resolving technical debt, fostering innovation, and improving communication across the financial industry. This shift would free up resources for the development of new tools and services that benefit the entire retirement plan ecosystem, from asset managers to participants. Instead of spending on costly licensing fees, the industry could focus on creating solutions that drive progress and enhance investor outcomes, improving efficiency and connectivity throughout the system." [127]

"A standardized, open identifier like FIGI would significantly streamline our processes for monitoring and reporting on investment performance, fees, and risks. It would reduce the complexities associated with navigating multiple identifier systems, allowing us to focus more on optimizing investment strategies and conducting rigorous fiduciary oversight. Moreover, the current licensing scheme for proprietary identifiers has led to distortions and inaccuracies in investment identification. To avoid prohibitive licensing fees, some market participants have resorted to creating non-standard, non-globally unique identifiers. This practice introduces inconsistencies and reduces the reliability of data across the industry. Adopting FIGI would help eliminate these distortions, ensuring that investment identification is accurate, consistent, and free from such economically driven compromises. This efficiency is essential in maintaining the high standards of care required to fulfill fiduciary obligations." [128]

VanEck, a New York-based investment management firm, also shares these views:

"Shareholders, who ultimately bear the indirect costs of government-mandated licensing fees imposed on reporting entities such as mutual funds and ETFs, stand to benefit from

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[126] *Id.*

[127] *See* Letter from LeafHouse at 1, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-521975-1499262.pdf.

[128] *Id.* at 2.

the expedited implementation of open license data standards as outlined in the proposed rule….

[VanEck] commend[s] the [SEC] for its efforts to reduce this burden and strongly urge[s] the SEC to move quickly in implementing these standards, which represent a crucial shift away from the current reliance on proprietary identifiers."[129]

Corpaxe, a fintech company based in New York that plays a unique role in the financial community as the industry leader in sharing interaction and event data between global brokers (sell side) and over 200 asset managers (buy side) that collectively manage over $40Tr in assets., notes in its letter:

"As a data intermediary for thousands of players in the global capital markets, Corpaxe fully supports the proposed joint data standards under the Financial Data Transparency Act of 2022 and specifically the adoption of the FIGI as the standard for financial instruments. We feel the industry will benefit greatly from this rule and specifically think these changes will result in:

- *An industry that is more aligned on primary identifiers allowing for greater interoperability, not just across government agencies, but across software systems and financial institutions*
- ***A more level playing field that makes it easier for new startups** and fintech providers to gain a foothold in the industry without having to purchase proprietary and expensive data sets to service clients*
- ***More flexibility to choose and switch data providers and greater competition across the market data space***
- *Better and more seamless reporting to regulators globally."*[130]

Robert Correa, co-founder of **Sherpa Consultancy**, a specialist market data practice in the U.K., agrees. In particular, he notes that FIGI promotes innovation by lowering barriers to entry – such as enabling start-up technology firms developing asset manager technologies to compete with Bloomberg and other established incumbent vendors:

"*Third party FinTech vendors who enter into the market have a huge burden to integrate market data feeds into their technology solutions and platforms. FIGI reduces this burden by being a universal identifier which permits newer technologies to come to market faster. An example, a small Swedish Order Management System and IBOR called Limina A.B. was able to enter the market and integrate with all the above market data vendors due to FIGI. This permitted the startup OMS provider to compete at a level*

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[129] *See* Letter from VanEck, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-526515-1510662.pdf.

[130] *See* Letter from Corpaxe, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-513595-1485362.pdf. (Emphasis added).

playing field with incumbent vendors such as Charles River, Aladdin, Bloomberg AIM, and SS&C EZE."[131]

Importantly, Correa also observes that FIGI has been adopted by top market data vendors:

"FIGI being an open symbology has now been adopted by the top market data vendors such as Bloomberg, Factset, ICE, S&P, IHS Markit, SIX, Rimes, and others"[132]

Adoption of free and open-source identifiers will benefit academic research and the public.

The **Consumer Federation of America** – a non-profit organization consisting of nearly 300 consumer-oriented non-profits with a combined membership of 50 million – underscored the criticality of identifiers being available as an open-source standard:

"Because it is non-proprietary, it ensures broad access without the costly barriers associated with proprietary identifiers such as the CUSIP system. Shifting away from proprietary to non-proprietary identifiers will benefit regulators, investors, and researchers, enabling easier access to higher-quality data and the ability to undertake higher-quality analysis."[133]

Bundesverband Investment und Asset Management e. V. ("BVI"), a German fund industry association with members representing more than 95% of the German fund market, agreed. In fact, BVI believe that FIGI has to be supported even though CUSIP is entrenched because FIGI is open source:

"Given the situation in the US when it comes to the identification of other financial instruments, we support that the agencies propose to establish the Financial Instrument Global Identifier (FIGI) established by the Object Management Group as an identifier of financial instruments, at least until the US-ISIN / CUSIP license issue is resolved in full… We would like to point out that US-ISIN users based in the EU countries benefit from the fee free use of the identifier under the EU Commission decision in Case No. 39592 Standard and Poor's[.] Anywhere in the world the use of the locally allocated ISIN is also always license and fee free, as only the US identifiers are proprietary and not available under an open license. We therefore support the use of the OTC-ISIN, the ISIN, and temporarily the FIGI to easily identify all the instruments in the agencies reporting scope on a user license and fee free basis."[134]

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[131] *See* Letter from Robert Correa, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-508315-1476962.html.

[132] *Id.*

[133] *See* Letter from the Consumer Federation of America at 2, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-530295-1524202.pdf.

[134] *See* Letter from Bundesverband Investment und Asset Management e. V. (BVI), *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-516895-1489422.pdf.

In many instances, the Agencies make their data available to the public. Academics, who are often constrained by tight budgets, rely on publicly available open data to conduct research on financial markets. While CUSIP suggests that there are provisions to enable academic research using its proprietary identifier, comments by faculty and staff at the **University of Michigan** and **University of Denver** note that using CUSIP is often difficult and cost prohibitive:

> *"In our roles as educators and researchers, the ability to access free and open source data is essential. The difficulty and often prohibitive cost of accessing data on municipal finances has long inhibited research efforts, student engagement, and general public transparency in this field. We particularly welcome any movement toward the use of free and open source legal entity and security identifiers."* [135]

The Securities Arbitration Clinic at the **University of Pittsburgh School of Law** offers free representation for small investors with claims under $75,000 in disputes before FINRA. It is one of 10 law schools across the country that offer securities arbitrations services to clients who cannot afford an attorney and whose injuries are viewed by the practicing securities bar as too insignificant in value to accept.

> *"The Clinic believes enhancing the accessibility, usefulness and interoperability of data reported to the federal financial regulators will be good for small investors and the average consumer. Through the new joint data standards, the rule aims to render collected data more searchable and machine readable... this could make the data more understandable and digestible by the average consumer, likely through third-party, open-source, data-aggregation tools and resources, and so this standardization is welcome. The shift from proprietary identifiers in each category to open license standards will mean average consumers can better begin to start to learn the language of the industry as they improve their financial and investing literacy."* [136]

The Agencies have flexibility under the FDTA.

The **Bond Dealers of America**, a DC-based group representing the interests of securities dealers and banks focused on the US fixed income markets, notes that the Agencies have flexibility in which identifiers they prescribe:

> *"We recognize that the long-established scheme for securities identification, the Committee on Uniform Securities Identification Procedures (CUSIP) system, does not*

[135] See Stephanie Leiser and Natalie Fitzpatrick, University of Michigan, and Christine Kuglin, University of Denver at 2, *available* at https://www.sec.gov/comments/s7-2024-05/s7202405-530075-1523842.pdf.

[136] See Letter from Professor Alice Stewart et., al, University of Pittsburgh Law School at 5, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-531755-1527962.pdf.

meet the Agencies' goal that the FDTA system for financial instrument identification must be nonproprietary."[137]

"Footnote 20 of the Proposal states 'in connection with an Agency-specific rulemaking, an Agency could determine to use an identifier that is not in the joint standards, including an Agency-specific identifier, 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, including an Agency-specific identifier, would minimize disruptive changes to the persons affected by those standards.' This means the Commission will have flexibility in specifying standards for data collection mandates under its jurisdiction in the next round of rulemaking. We urge the Commission to use this authority to provide as much flexibility as possible around data reporting standards."[138]

The Agencies' use cases of identifiers under the FDTA are separate from industry use cases.

The Enterprise Data Management Council, which we previously noted as supporting the open standards proposed in the rulemaking, also understands that the agencies' use case is separate from industry participants':

"Additionally, the EDMC supports the FDTA's proposal to establish the Financial Instrument Global Identifier (FIGI) as an international identifier for all classes of financial institutions. Other industry identifiers, such as CUSIP, and ISIN, are still in use by industry and provide critical efficiencies to industry as well. Together these identifiers can and are being used to drive transparency and enable efficiency in financial transactions and reporting."[139]

Yet another commenter, **Federated Knowledge**, a consultancy that helps firms connect and integrate diverse data sources, agrees with this view:

"I think it's important to note that mandating identifiers such as FIGI and LEI does not require expensive replacement of internal processing systems and applications, but a mapping stage that adds the official identifier at the point of submission. And that

[137] *See* Letter from the Bond Dealers of America at 2, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-532715-1528582.pdf.
[138] *Id*.
[139] *See* Letter from Enterprise Data Management Council at 2, *available at* https://www.fhfa.gov/sites/default/files/2024-10/34_EDM_Council.pdf.

nothing precludes an organization using any number of different identifiers (internal or legacy) for the same entity: the linked data specifications were designed for this!"[140]

FIGI meets the requirements of the FDTA and will benefit regulators.

A number of commenters noted that FIGI meets both the needs of regulators and the requirements set forth in the FDTA. For example, the **Healthy Markets Association**, a not-for-profit member organization whose members include public pension funds, investment advisors, broker-dealers, exchanges, and data firms focused on improving the transparency, efficiency, and fairness of the capital markets, wrote:

"As the Data Standards Proposal explains, FIGI has a lot going for it. FIGI is legally permitted by the statute because it is available under an open license. FIGI covers a broad swath of financial instruments, not just securities. It can be used for digital assets or loans, for example. FIGI is available in not just the US, but globally. FIGI has "real-time availability." FIGI has already been adopted as a US standard by the ANSI Accredited Standards Committee. No other existing financial product standard meets all of these criteria.

Moreover, the Commission has already acknowledge[d] the value of FIGI. As the agency noted in its 2022 revisions to position reporting requirements, the use of FIGI "would enhance … the usefulness of [reported] information to the Commission, other regulators, or members of the public and other market participants." These benefits would accrue in other reporting contexts as well." [141]

[140] *See* Letter from Federated Knowledge at 3, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-533335-1529182.pdf.

[141] *See* Letter from Healthy Markets Association at 2-3, *available at* https://www.sec.gov/comments/s7-2024-05/s7202405-529055-1521482.pdf.