

Ready for Anything - Using Data in Perilous Times

2020 Investor Forum

Tuesday, November 17

Wednesday, November 18



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Financial Identifiers for Investors, Business & Regulators

Financial Identifiers for Investors, Business & Regulators

- Speakers:
 - **Tom Brown**, Associate Director, Data Strategy and Standards Office of Financial Research, U.S. Department of the Treasury
 - **Steve Meizanis**, Global Data Product Manager, Bloomberg LP
 - **Jeff Braswell**, former Member of the Board of Directors, Global LEI Foundation (GLEIF); Founding Partner, Tahoe Blue Ltd

XBRL Investor Forum 2020

Open Identifiers – Financial Instrument and Entity Identification during a Crisis

Steven Meizanis

Bloomberg Global Head of Open Symbolology and LEI
Services

ENTITY & FINANCIAL INSTRUMENT IDENTIFICATION: FIGI

Financial Instrument Global Identifiers (FIGI ; \fig - ē\); 12-character alphanumeric global standard code, adopted in 2014 by the Object Management Group (OMG; a data standards organization), offers coverage of a broad range of instruments. Identifiers created using the FIGI standard are available at no cost and can be used in operational functions across all parts of the financial services sector and are freely redistributable.

CURRENT MARKET

- No globally accepted industry standard or format across asset classes
- Numbering agencies do not cover all asset classes and limit use of assigned identifiers
- New regulations require identification of more instruments and instruments types in multiple jurisdictions
- Market participants do not have an identification scheme that is **consistent, unique, non-changing** and covers all financial instruments globally
- Support & mapping is burdensome for data consumers
- Current instrument identification focuses on single 'instance' for specific purpose, ignoring hierarchy and context

BENEFITS

- FIGIs are applicable to all financial instruments across all asset classes in the financial sector and are invaluable for instruments lacking a standard identifier such as loans, OTC derivatives, commodities, and other assets
- Open sourced, non-proprietary, consistent identifier available for regulatory reporting, regardless of jurisdiction
- Users will be able to leverage the identifier for a variety of functions including mapping, facilitating settlement, trading and aggregating risk.
- Single format, regardless of asset class. ID has no inherent intelligence, and is accompanied by descriptive meta data including hierarchical structure
- Able to satisfy contextual and fit for purpose needs

<u>B</u>	<u>B</u>	<u>G</u>	<u>O</u>	<u>O</u>	<u>O</u>	<u>B</u>	<u>L</u>	<u>N</u>	<u>Q</u>	<u>1</u>	<u>6</u>
1	2	3	4	5	6	7	8	9	10	11	12

(IBM NYSE venue level FIGI provided above as example)

ENTITY & FINANCIAL INSTRUMENT IDENTIFICATION: LEI

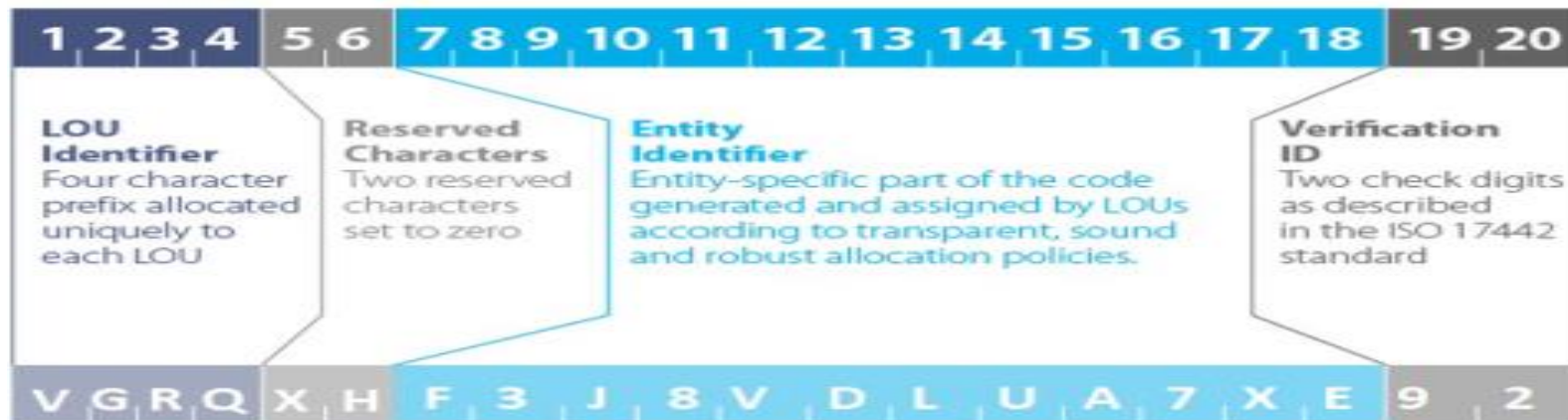
Legal Entity Identifier (LEI); The LEI is a unique 20-character alphanumeric code based on the ISO 17442 standard that is assigned to legal entities that are counterparties to financial transactions. The LEI code itself is neutral, with no embedded intelligence or country codes which would create unnecessary complexity for users.

KEY LEI PRINCIPALS

- Global ISO standard
- A single, unique identifier is assigned to each legal entity
- It is supported by high data quality
- It is a public good, free of charge for all users.
- Assigned only on a request basis, with yearly renewal
- Assigned by a designated LOU under federated authority and coordination by GLEIF organization

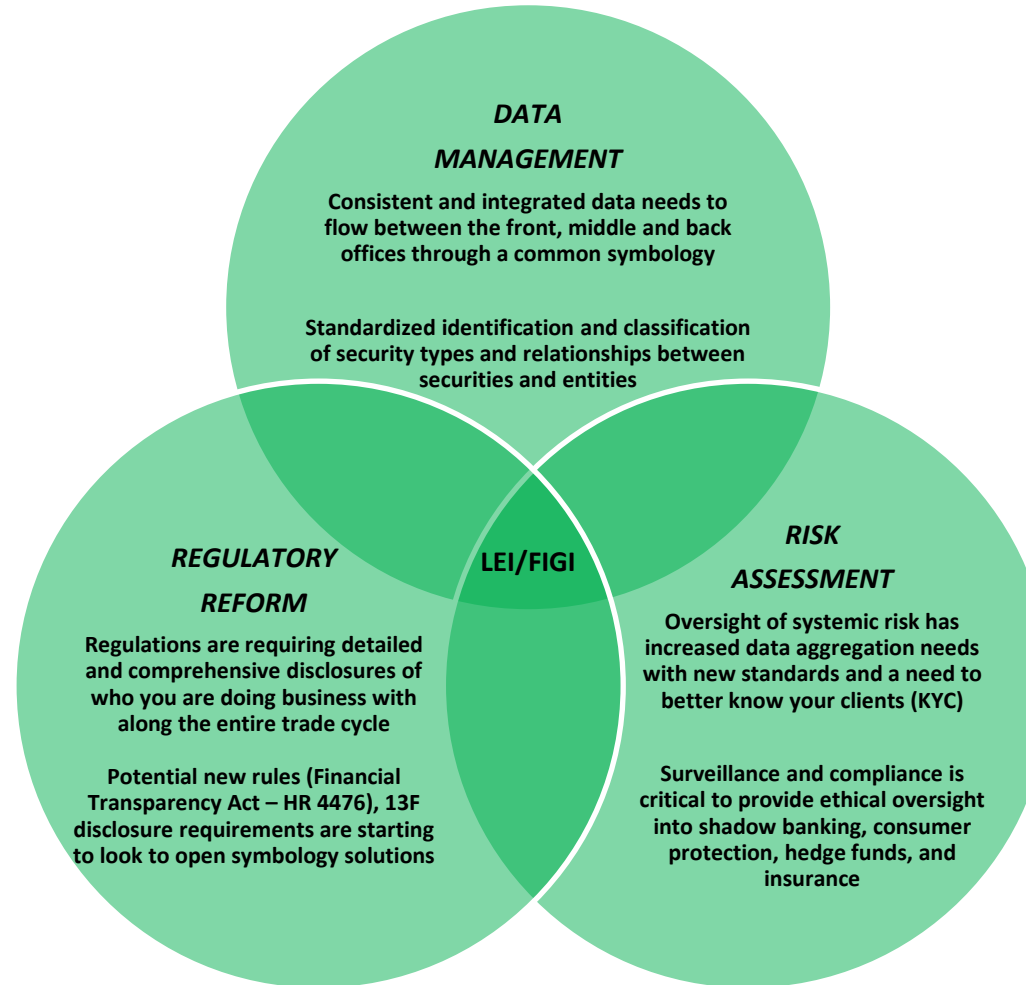
LEI BENEFITS

- Improved risk management.
- Increased operational efficiency.
- More accurate calculation of exposures.
- Simplified regulatory reporting.
- Ensured counterparties for any business process.
- Unique counterparty identification globally.

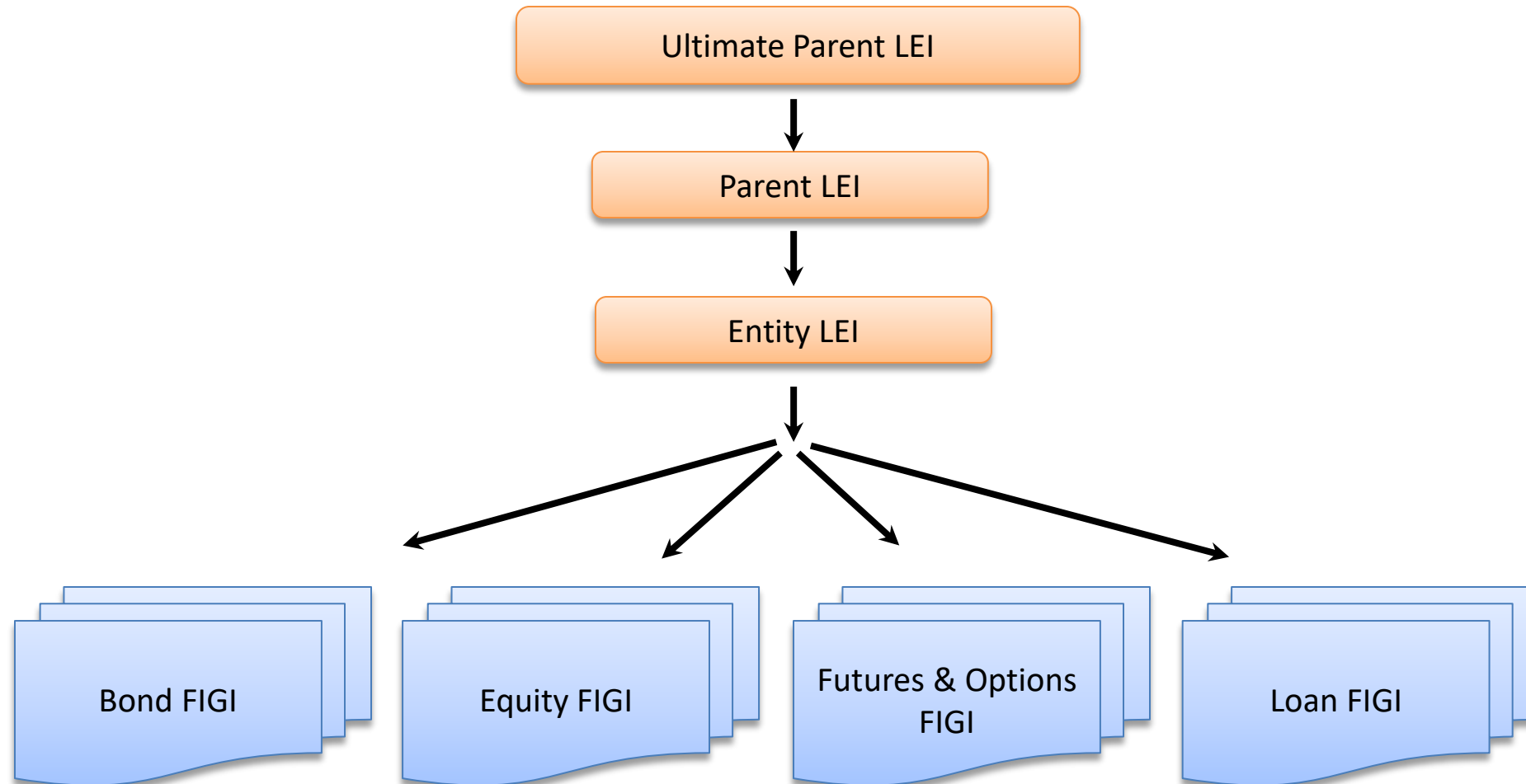


Example: International Business Machines Corp, United States

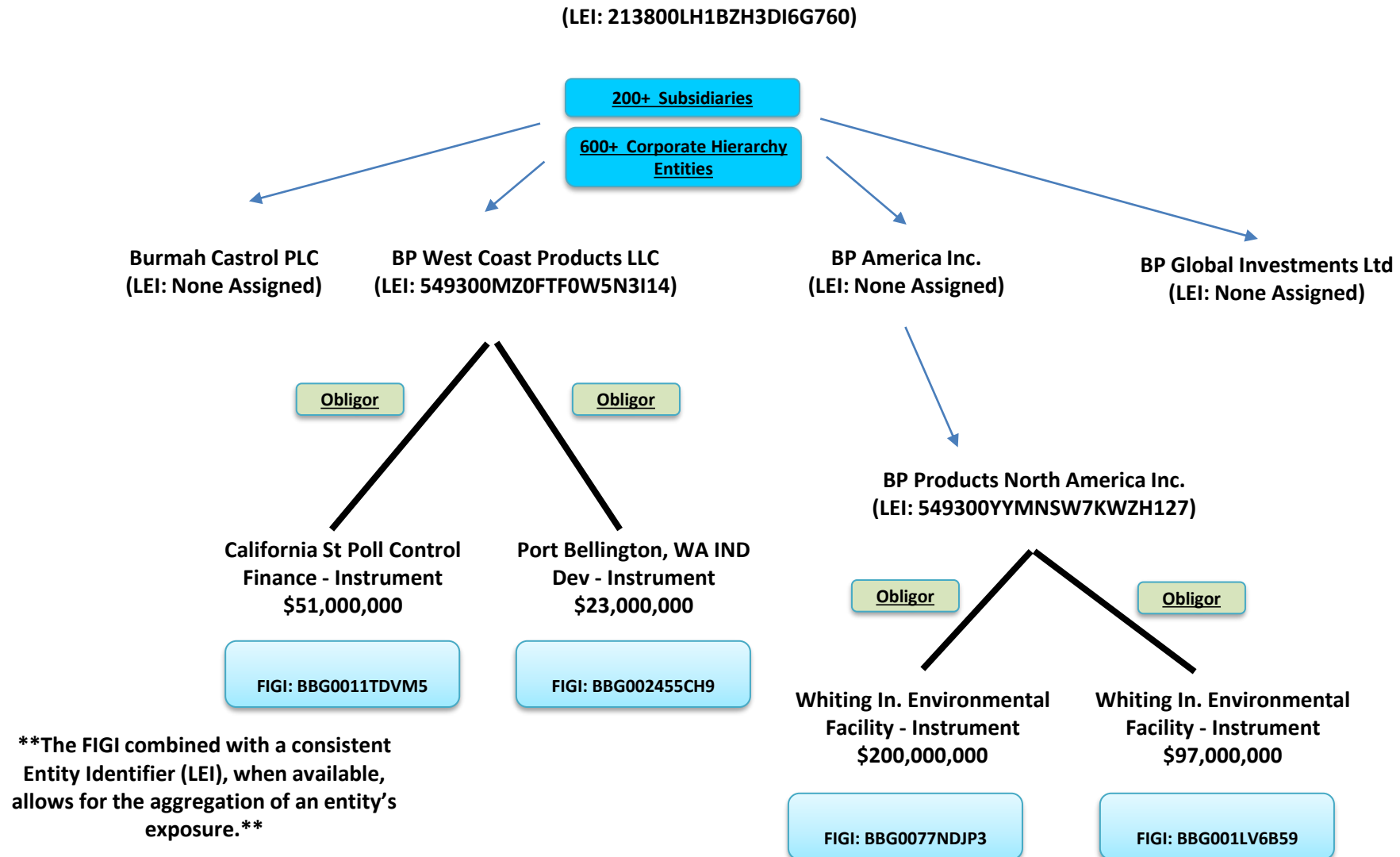
The Importance of Identifiers is highlighted even more during a crisis where one needs to identify their exposures to an instrument, an entity, or a segment



Corporate Structure – The LEI allows one to understand an entity's corporate structure which allows one to fully know their exposure to that entity.



Company Hierarchy – BP PLC



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Legal Entity Identifiers

Jeff Braswell

former Member of the Board of Directors,
Global LEI Foundation (GLEIF);
Founding Partner, Tahoe Blue Ltd

Legal Entity Identifiers

Legal Entity Identifier (LEI) Recent Developments

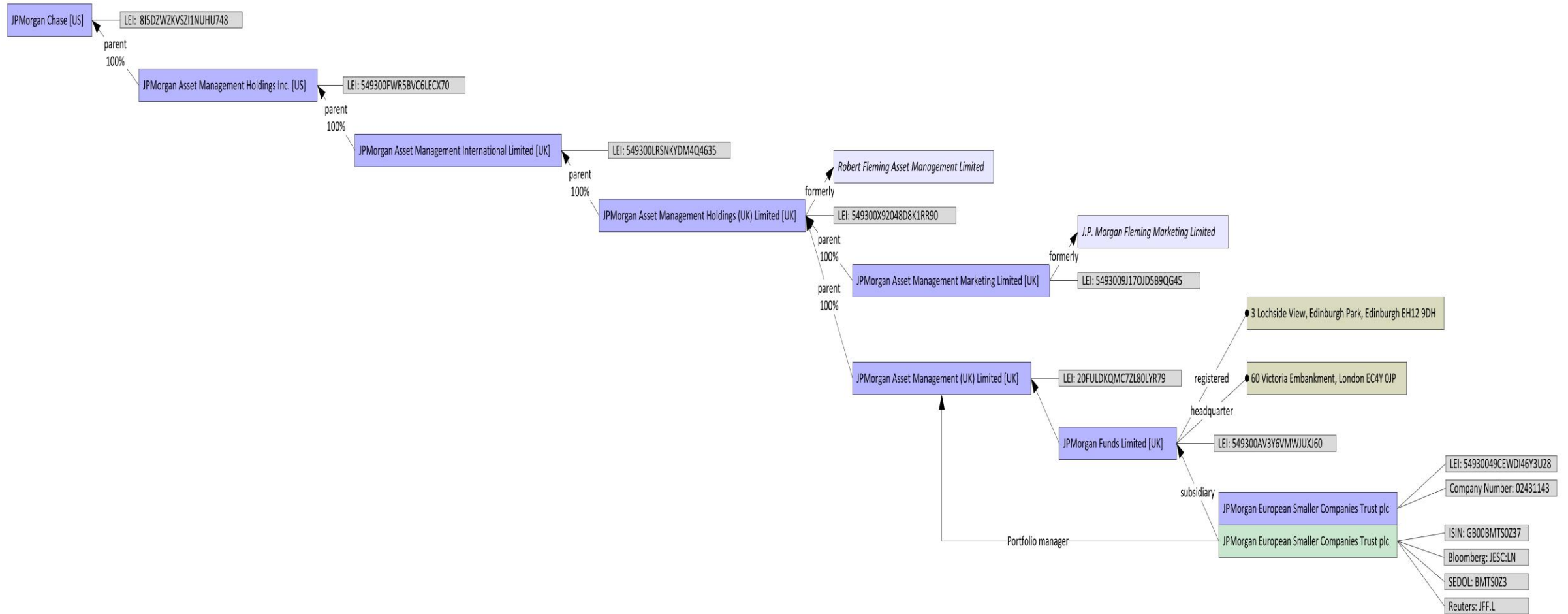
Identifiers for Business

Identifiers for Regulators

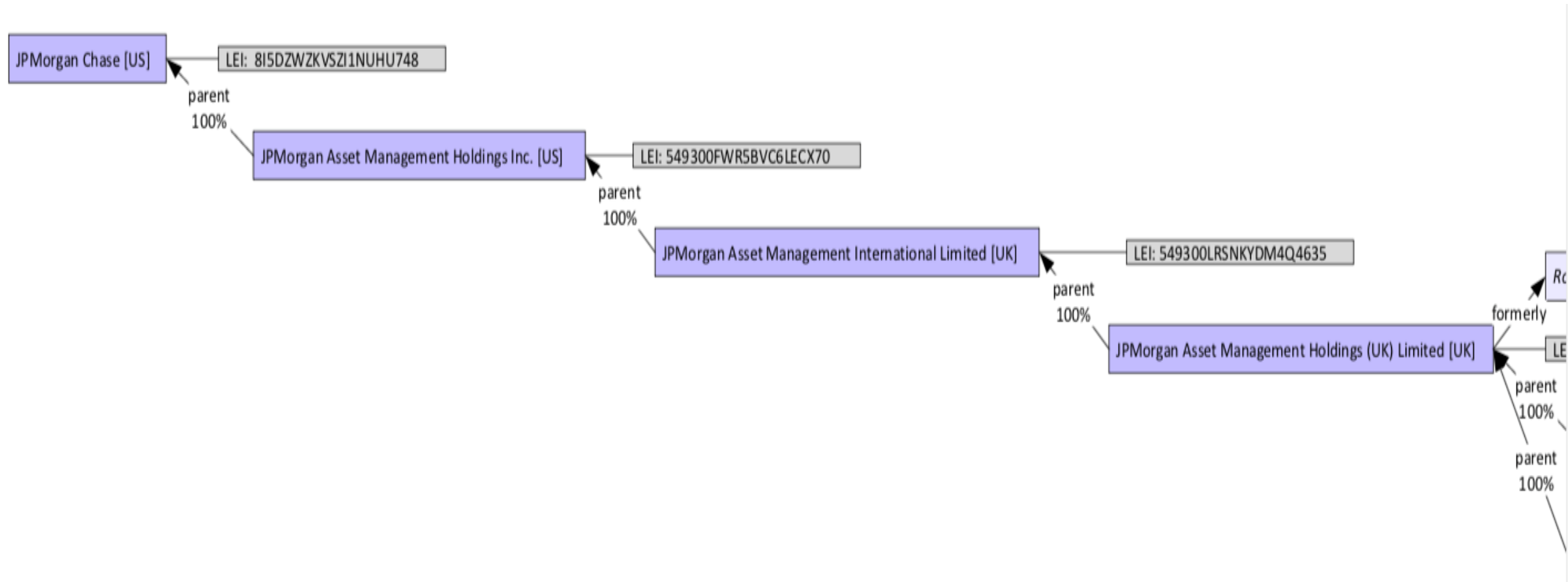
Identifiers and the Digital Economy

Financial Stability and Systemic Risk

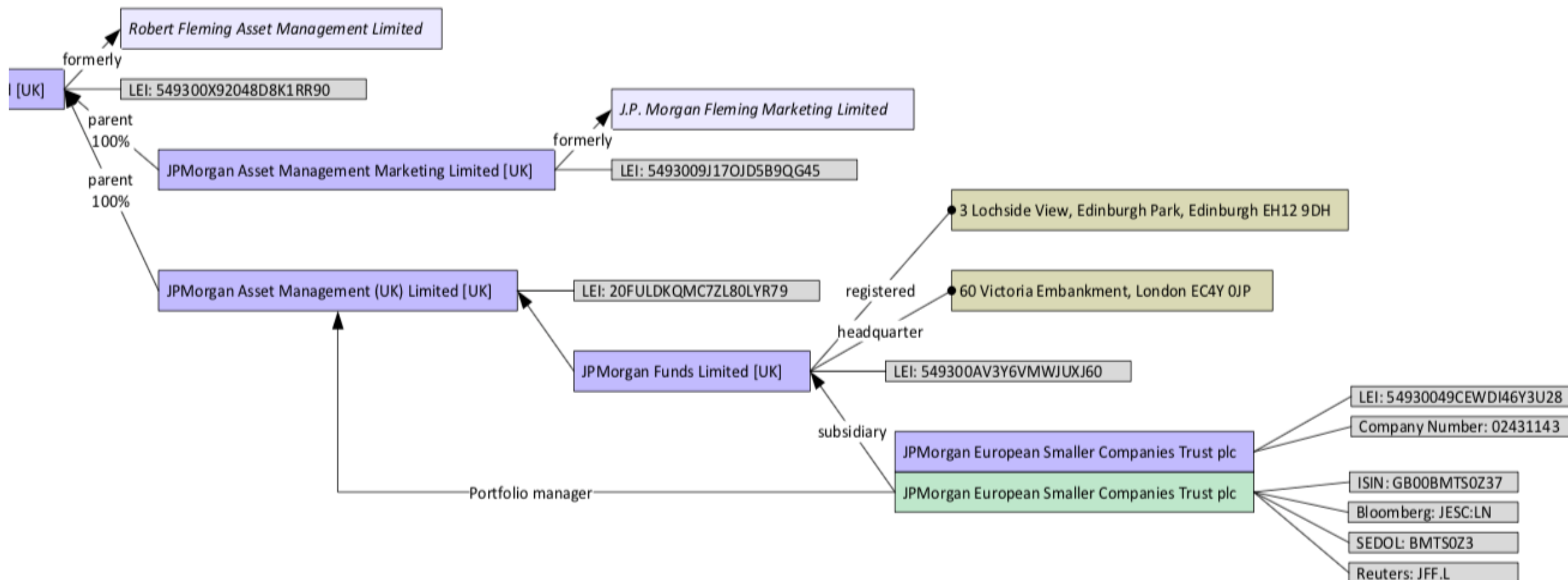
Legal Entity Identifier Relationships



Legal Entity Identifier Relationships (1)



Legal Entity Identifier Relationships (2)



Legal Entity Identifier (LEI) Recent Developments

Legal Entity Identifier (LEI) Recent Developments

LEI: New Relationship Types: Funds

Fund Management Entity relationship:

IS-FUND-MANAGED-BY

Umbrella Structure relationship:

IS_SUBFUND_OF

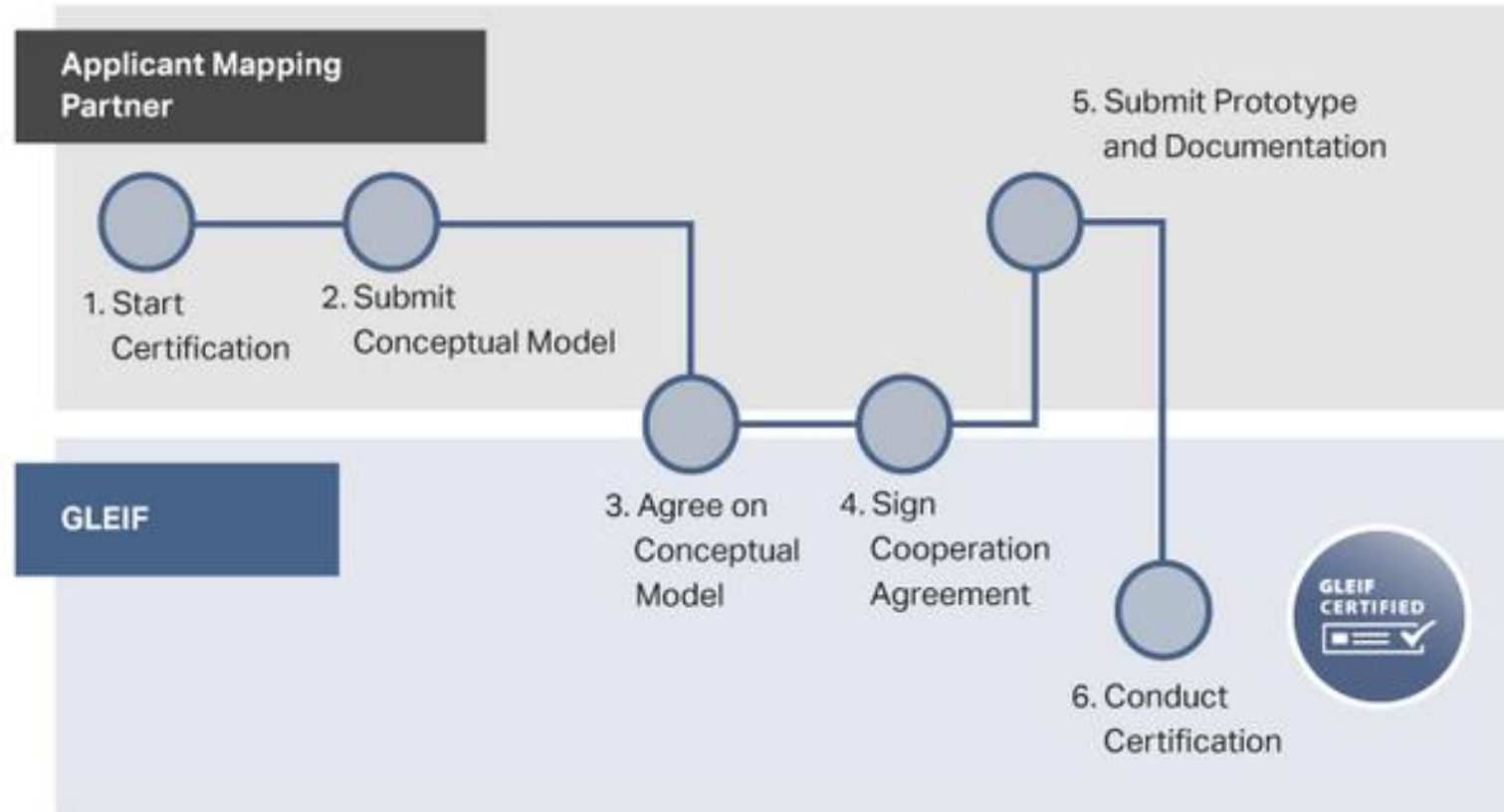
Master-Feeder relationship:

IS_FEEDER_TO

LEI: New Data Quality Measures: Legal Entity Events

LEI: XBRL Taxonomy Enhancements: ISO 17442 Format Validation

LEI: GLEIF LEI Mapping Certification Service



LEI: GLEIF API

Query LEI Records by

Paste a list of search terms (comma separated)

One search term per line or a comma separated

entity.names

bic

isin

lei

[https://api.gleif.org/api/v1/lei-records?page\[size\]=10&page\[number\]=1&filter\[entity.names\]=tahoe](https://api.gleif.org/api/v1/lei-records?page[size]=10&page[number]=1&filter[entity.names]=tahoe)

0 / 7000

QUERY

(Ctrl + Enter)

Identifiers for Business

LEI in Capital Markets: Benefits

- Reduces the costs associated with:
 - Onboarding clients and
 - Middle-and back-office processing of stocks, bonds and other securities trades
- LEI as the primary attribute that:
 - Aggregates client trade information
 - Reconciles disparate internal systems using different client ID numbers

Source: White paper released by McKinsey & Company and GLEIF titled '[The Legal Entity Identifier: The Value of the Unique Counterparty ID](#)'

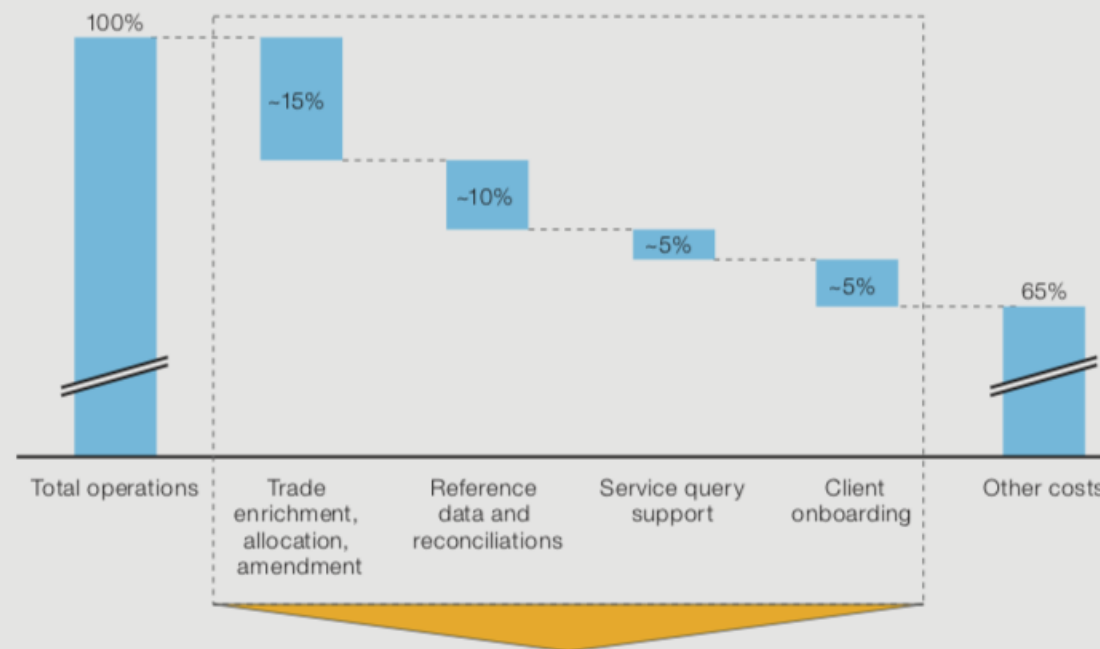
LEI in Capital Markets: Reducing Operational Costs

Exhibit 5

LEIs can help reduce operational costs in several capital markets processes

Annual operations costs — Global investment banks

Percentage



~35% of total trade processing costs can be streamlined through the use of LEIs

There is potential to optimize 10% of these costs, leading to 3.5% reduction in total operations costs

Source: McKinsey estimates based on expert interviews

Source: White paper released by McKinsey & Company and GLEIF titled '[The Legal Entity Identifier: The Value of the Unique Counterparty ID](#)'

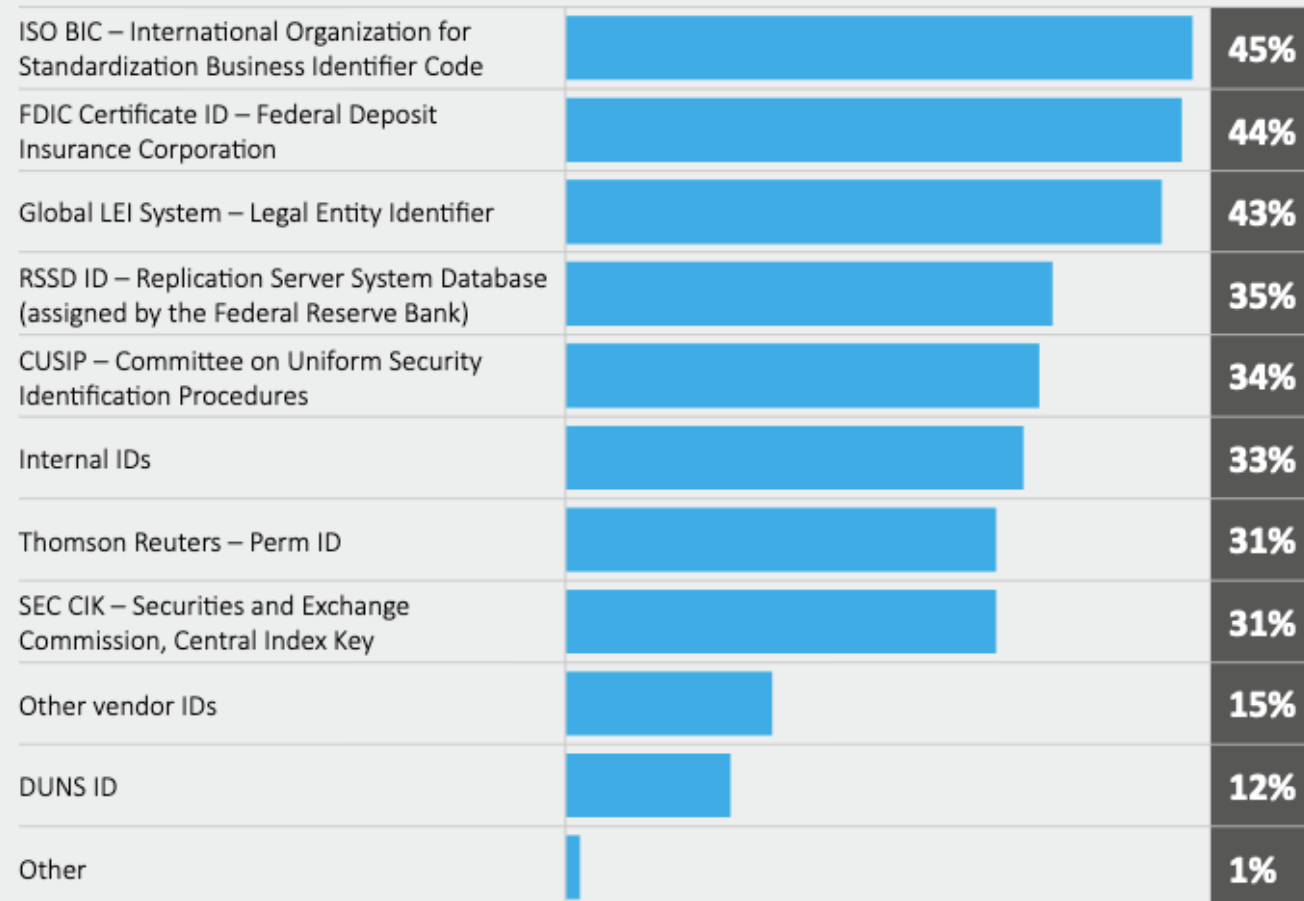
LEI in KYC: A New Future for Legal Entity Identification

This report is a collaborative effort between GLEIF and the London-based research agency Loudhouse. The research presented within it was conducted among 102 senior salespeople in the banking sector, with a regional split as follows: 35 US, 34 UK and 33 German businesses. The organizations surveyed ranged evenly from having under 50 employees to over 1,000 employees. The detailed results are available for download on the GLEIF website.

Source: "A New Future for Legal Entity Identification", GLEIF and Loudhouse

The Proliferation of Identifiers

Fig. 1
Identifiers
used



Source: “A New Future for Legal Entity Identification”, GLEIF and Loudhouse

Key Findings

Key findings include:

- Businesses use an average of **4 identifiers**
- Onboarding takes an average of **6–7 weeks**
- **57%** agree that reliability of reference data is a challenge
- **55%** agree that the resourcing of onboarding is a challenge
- **55%** agree lengthy processes mean risk of business loss
- **61%** agree that digital technology will further complicate the process

Source: "A New Future for Legal Entity Identification", GLEIF and Loudhouse

LEI Validation Agents

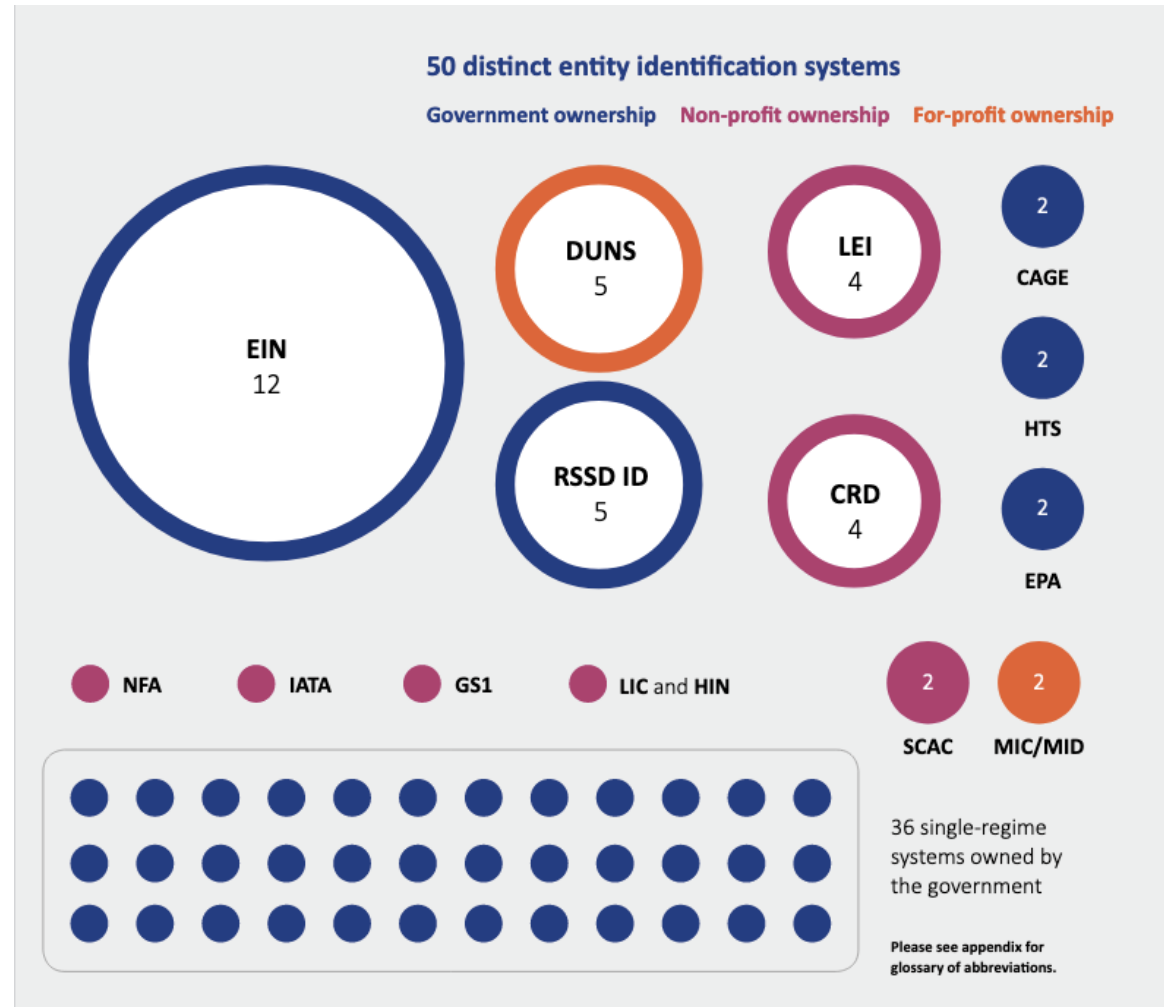
29 September 2020 -The Global Legal Entity Identifier Foundation (GLEIF) has today announced that financial institutions (FIs) worldwide can realize a variety of cost, efficiency and customer experience benefits by assuming a new 'Validation Agent' role within the Global LEI System. FIs acting as Validation Agents simplify LEI issuance for their clients, reduce time-to-revenue, and future proof their institutions for digital innovation. The Validation Agent Framework is a new operational model in the Global LEI System.

By leveraging their know-your-customer (KYC), anti-money laundering (AML) and other regulated 'business-as-usual' onboarding processes, Validation Agents can now obtain an LEI for their customers when verifying a client's identity during initial onboarding or during a standard client refresh update

By becoming Validation Agents, FIs can spare their clients from these duplicative processes and deliver a faster and more convenient customer experience. Validation Agents can also capitalize on additional opportunities to add client value and achieve market differentiation. By expanding their LEI issuance beyond those that require an LEI for financial compliance, a Validation Agent can equip its whole business client base with globally recognized identities, which can be used across borders with any counterparty or supplier around the world.

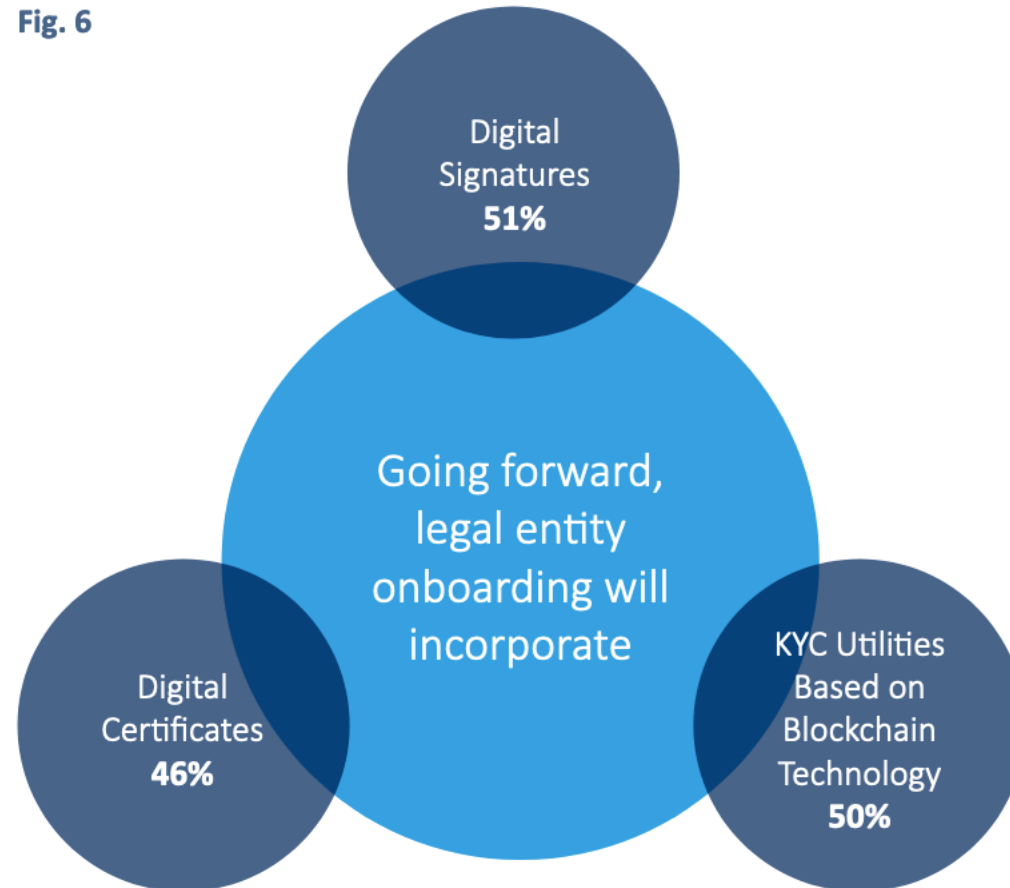
<https://www.gleif.org/en/about-lei/get-an-lei-find-lei-issuing-organizations/validation-agents>

Identifiers for Regulators



Identifiers and the Digital Economy

Fig. 6



Source: "A New Future for Legal Entity Identification", GLEIF and Loudhouse

Identifiers and the Digital Economy

www.TrustOverIP.org



TRUST
Over **IP**
FOUNDATION

The Trust over IP Foundation is defining a complete architecture for Internet-scale digital trust that combines both cryptographic trust at the machine layer and human trust at the business, legal, and social layers.

Verifiable Credentials Data Model 1.0

Expressing verifiable information on the Web



W3C Recommendation 19 November 2019

This version:

<https://www.w3.org/TR/2019/REC-vc-data-model-20191119/>

Financial Stability and Systemic Risk



Questions?

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