

*Remarks of Linda Powell, Chief Data Officer, Office of Financial Research,  
U.S. Department of the Treasury at the  
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Good morning. Thank you for inviting me to be with you here today.

I would like to say a special thanks to Dennis Wisnosky of the EDM Council for extending the invitation for me to join you, as well as Dr. Richard Soley for his leadership of this important group. I would also like to recognize Mike Atkin, also of the EDM Council and a member of our Financial Research Advisory Committee at the Office of Financial Research, or OFR.

Dennis asked me to speak for a few minutes today about, “The Importance of Standards and Semantics Across the Regulatory Landscape” and I am very happy to do that.

Data standardization is a key part of the mandate of the OFR, so we spend a good deal of time talking about the importance of standards. It is exciting to be in a roomful of people who have an interest in that subject and who share my passion for data standards.

The law that created the OFR — the Dodd-Frank Act — directs the Office to standardize the types and formats of data reported and collected. Although the title of our Office refers to research and not data, we like to point out that you can’t do good research without good data. That’s where standards come in — making data fit for the purposes of aggregating, comparing, and sharing.

Good data and good research can help us gain insights about the financial system, about its vulnerabilities, and about ways that shocks can spread across markets. By better understanding how these forces work, we can make headway in pursuing our mission of promoting financial stability.

So, I would like to talk about good data this morning by describing some of the OFR’s data standards initiatives, then discuss the benefits for financial regulators and for industry of uniform standards for financial data.

At the OFR, the centerpiece of our initiatives on financial data standards is the legal entity identifier, or LEI, which is like a bar code for identifying entities that engage in financial market transactions. The LEI is a linchpin for making connections in the massive volumes of financial data that course through the international economy every day.

The LEI is taking hold on a global scale and its governance structure is nearing completion. Already, a dozen early-stage registrars have issued more than 220,000 identifiers that are being used for regulatory reporting in North America and Europe.

As the use of the LEI continues to grow, we at the OFR are increasingly turning our attention to other facets of financial data standards, such as the proposed universal mortgage identifier, or UMI. The need for such a standard is pressing in the U.S. because debt related to home mortgage loans represents 70 percent of household liabilities. A single UMI that protects personal privacy would bring coherence to fragmented data and would significantly benefit households, industry, regulators, and researchers.

The latest OFR research working paper, which reflects substantial input from several other federal agencies, discusses the characteristics that a UMI should have and criteria for implementation.

Another area of focus for the OFR is the need for standards for data held by swaps and trade repositories. Dodd-Frank required for the first time that derivatives trades be reported to these repositories. This requirement promised transparency in derivatives markets and keener insight into the types and levels of exposure throughout the financial system.

However, this promise is not yet realized because the data are currently fragmented, with different trade repositories in different jurisdictions collecting different information in different ways. This fragmentation is keeping us from developing a complete picture of the market.

By collaborating with the industry, the repositories, and the international regulatory community, we can establish standards for reporting, so that data can be aggregated and analyzed to promote the stability of the global financial system. The OFR is working on this issue with the Commodity Futures Trading Commission and, internationally, as part of the Financial Stability Board.

A final data standard that I will mention relates closely to the LEI. During the fall of Lehman Brothers in the early days of the financial crisis, one of the most vexing problems was the inability to identify counterparty transactions, not only with Lehman, but with Lehman's subsidiaries. Understanding and documenting corporate structures, or hierarchies, has been part of the global LEI since the G-20 directed the Financial Stability Board to develop the LEI framework. Incorporating hierarchies in the LEI system promises valuable information for tracking the often complex structure of legal entities.

Coupled with the LEI, information about corporate hierarchies will give financial regulators deeper insights into how large financial institutions are structured and how they are connected to each other. We are addressing this need through both the Global LEI System and in individual countries.

So, how do these OFR initiatives relate to semantics? As all of you know, the theme for today's technical meeting is, "Semantics – Crossing the Chasm."

I think a pretty strong case can be made that the expanding adoption of the LEI demonstrates that financial standards in general are crossing the chasm from early adopters to more widespread acceptance. We expect this movement toward consistent data standards to lay the groundwork for greater use of semantic technologies.

Historically, the financial industry has not been at the forefront of standardization. Other industries embraced standardization decades ago or even centuries ago. Decades ago, data were not as central to the world of financial services businesses as they are today. We now live in a world that is data-driven as never before. A consensus is emerging within the financial industry and among policymakers across the globe that data standards are essential for effective risk management, analysis, monitoring, and supervision.

Without standards to harmonize all of the data, we have only an enormous amount of noise — and an enormous expense. Industry groups have estimated that the world’s largest banks spend more than \$1 billion per year on integrating disparate data sources.

Semantics are a key part of any discussion about standards because data cannot be aggregated, compared, and shared if those data do not share a common language. Semantics provides the bedrock of definitions for standards.

An example of the importance of semantics would be asking someone at today’s meeting what OMG stands for. You would get a very different answer than the response you would receive from my children.

In financial terms, when you talk about capital and owner’s equity, does everyone have the same understanding? By applying semantic technology, we can ensure that we are all on the same page, speaking the same language.

This quest for common meaning is essential for government and for industry.

With a shared language and an understanding of industry terminology, government regulators can know how to ask industry for data and reports. Industry representatives will then know how best to comply with those requests, will understand how regulators measure compliance, and will be able to define the underlying data required for compliance.

A related concept is an ontology, or a standard way to define relationships between entities.

I mentioned earlier that Mike Atkin is a member of the OFR’s Financial Research Advisory Committee. Just last month, the committee presented the OFR with a half-dozen recommendations, including a proposal that “the OFR adopt the goal of developing and validating a comprehensive ontology for financial instruments as part of its overall effort to meet its statutory requirement to ‘prepare and publish’ a financial instrument reference database.”

The committee proposed that the OFR work with industry and standards bodies to evaluate how ontology might contribute to transparency and financial stability analysis. The committee also recommended that the OFR consider playing a leadership role in governance for an industry-wide ontology.

A key part of our mission at the OFR is to strive for the identification and adoption of standards that will improve the quality and utility of financial data. As a result, we strongly support exploring the benefits of standard semantics and ontology in the financial industry.

Government can act as a catalyst for continued progress, but cannot succeed alone. For that, we need strong collaboration from all of you at this meeting and others like you. We need industry and government regulators to work toward consensus on uniform semantics and an ontology useful for both business purposes and regulatory reporting. The benefits are inviting and success is well within our sights.

Thank you again for having me here today.