

[Securities Regulation Daily Wrap Up, TOP STORY—CFTC publishes primer on smart contracts, hints at regulatory and compliance use cases and risks, \(Nov. 27, 2018\)](#)

Securities Regulation Daily Wrap Up

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By [Mark S. Nelson, J.D.](#)

The CFTC has published another blockchain primer, this time focusing on how smart contracts may spur business and regulatory innovations but with some attendant risks. The concept of a smart contract has been around since the 1990s and yet the term still means many things to many people although, at heart, it is just computer code that is repeatedly tested to see whether specified if-then scenarios have or have not occurred such that a particular result will obtain. The CFTC's [smart contracts primer](#) comes from the agency's financial technology initiative, LabCFTC, which [previously published](#) a primer on virtual currencies.

LabCFTC Director Daniel Gorfine [said](#) the agency's latest blockchain primer would survey how smart contracts may evolve and their unique risks. "Smart contracts are being used to drive further automation in our markets and may have an impact across a range of economic activities," said Gorfine.

Smart contract defined. The CFTC's primer attempts to define what "smart contract" means in the commodities space. Specifically, "[a] 'smart contract' is a set of coded computer functions" that (1) "[m]ay incorporate the elements of a binding contract..., or may simply execute certain terms of a contract;" and (2) "[a]llows self-executing computer code to take actions at specified times and/or based on reference to the occurrence or non-occurrence of an action or event..."

The primer cites several other definitions of "smart contract," including one from Nick Szabo that focuses on "smart contract" as a package of digitally-enshrined promises and protocols for performing those promises that discourages breach of contract. Versions of the Szabo definition have been cited by other regulators, including by the SEC in its [report of investigation](#) on The DAO (See footnote 3).

One might describe the CFTC's discussion of the characteristics of smart contracts as falling into two broad categories. First, a smart contract may be more or less "smart" depending on how it is structured, and it may not always be a legally binding contract. Second, a smart contract can be considered for some of its various purposes: authentication, association, and automation. According to the primer, smart contracts may be useful for verifying things like asset ownership or the identities of counter parties. Smart contracts also can associate or incorporate information from trusted outside sources such as oracles. With respect to automation, smart contracts can provide for the performance of tasks without the direct involvement of counter parties.

Some of the benefits of smart contracts identified by the CFTC's primer include standardization, security (especially the immutability or unchangeability of blockchain records), economy/speed, and certainty. Business-specific benefits cited by the primer could include streamlined trading, automation, reduced risks (e.g., trade, capital, and margin), and better compliance and data reporting. On the regulatory front, the CFTC said smart contracts could be used to ensure compliance (e.g., bar sales to persons/entities that are not eligible contract participants, stress testing and, as also could be the case for businesses, improved data reporting to regulators).

Regulation and risk. The CFTC primer reviewed the many areas in which the agency has oversight, such as futures and derivatives markets which can include digital assets. However, the primer warns that firms mulling the use of smart contracts should consult legal counsel before embedding them in financial products that are subject to CFTC oversight.

Moreover, the CFTC primer stated that existing laws apply to smart contracts. Those laws include CFTC regulations, plus federal and state securities laws, tax laws, commercial laws, Bank Secrecy Act and related anti-

money laundering rules, and money transmission laws. The CFTC has broad anti-fraud and anti-manipulation enforcement powers and the authority to target spoofing.

Aside from the legal risks, the primer further noted some more generalized risks associated with smart contracts. For example, there is a risk of coding errors, a trusted source (i.e., oracle) could fail, and there is nearly omnipresent cybersecurity risk. The primer also noted that smart contract good governance principles were still in an early stage of development by industry participants.

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