

# An innovative RegTech approach to financial risk monitoring and supervisory reporting

Petros Kavassalis; Harald Stieber; Wolfgang Breymann; Keith Saxton; Francis Joseph Gross

[+ Author & Article Information](#)

Journal of Risk Finance (2018) 19 (1): 39–55.

<https://doi.org/10.1108/JRF-07-2017-0111> [Article history](#) 

## Purpose

The purpose of this study is to propose a bearer service, which generates and maintains a “digital doppelgänger” for every financial contract in the form of a dynamic transaction document that is a standardised “data facility” automatically making important contract data from the transaction counterparties available to relevant authorities mandated by law to request and process such data. This would be achieved by sharing certain elements of the dynamic transaction document on a bearer service, based on a federation of distribution ledgers; such a quasi-simultaneous sharing of risk data becomes possible because the dynamic transaction document maintain a record of state in semi-real time, and this state can be verified by anybody with access to the distribution ledgers, also in semi-real time.

## Design/methodology/approach

In this paper, the authors propose a novel, regular technology (RegTech) cum automated legal text approach for financial transaction as well as financial risk reporting that is based on cutting-edge distributed computing and decentralised data management technologies such as distributed ledger ([Swanson, 2015](#)), distributed storage ([Arner et al., 2016](#); [Chandra et al., 2013](#); [Caron et al., 2014](#)), algorithmic financial contract standards ([Brammertz and Mendelowitz, 2014](#); [Breymann and Mendelowitz, 2015](#); [Braswell, 2016](#)), automated legal text ([Hazard and Haapio, 2017](#)) and document engineering methods and techniques ([Glushko and McGrath, 2005](#)). This approach is equally inspired by the concept of the “bearer service” and its capacity to span over existing and future technological systems and substrates ([Kavassalis et al., 2000](#); [Clark, 1988](#)).

## Findings

The result is a transformation of supervisors’ capacity to monitor risk in the financial system based on data which preserve informational content of financial instruments at the most granular level, in

## Practical implications

The RegTech approach has the potential to contain operational risk linked to inadequate handling of risk data and to rein in compliance cost of supervisory reporting.

## Originality value

The present RegTech approach to financial risk monitoring and supervisory reporting is the first integration of algorithmic financial data standards with blockchain functionality.

---

**Keywords:** [Smart contracts](#), [Algorithmic standards](#), [Document engineering](#), [RegTech](#)

© Emerald Publishing Limited

Licensed re-use rights only

You do not currently have access to this content.

Sign in

Don't already have an account? [Register](#)

Client Account

Email address / Username

Password

[Reset password](#)

[Register](#)



Access through your institution


---

Purchased this content as a guest? Enter your email address to restore access.

Email Address

---

Pay-Per-View Access €35.00

 Buy This Article

### Rental

This article is also available for rental through DeepDyve.

