

Electronic Securities and Crypto Assets – regulatory framework

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The German draft on Electronic Securities

- This presentation documents implications of Germany's draft regulation on electronic securities for RegTech and SupTech.
- Regulation of electronic securities or a dematerialized system should not only serve the development of the private sector, FinTech and RegTech for regulatory compliance but also serve the public sector,
- namely support RegTech for regulators and SupTech for financial supervisors.

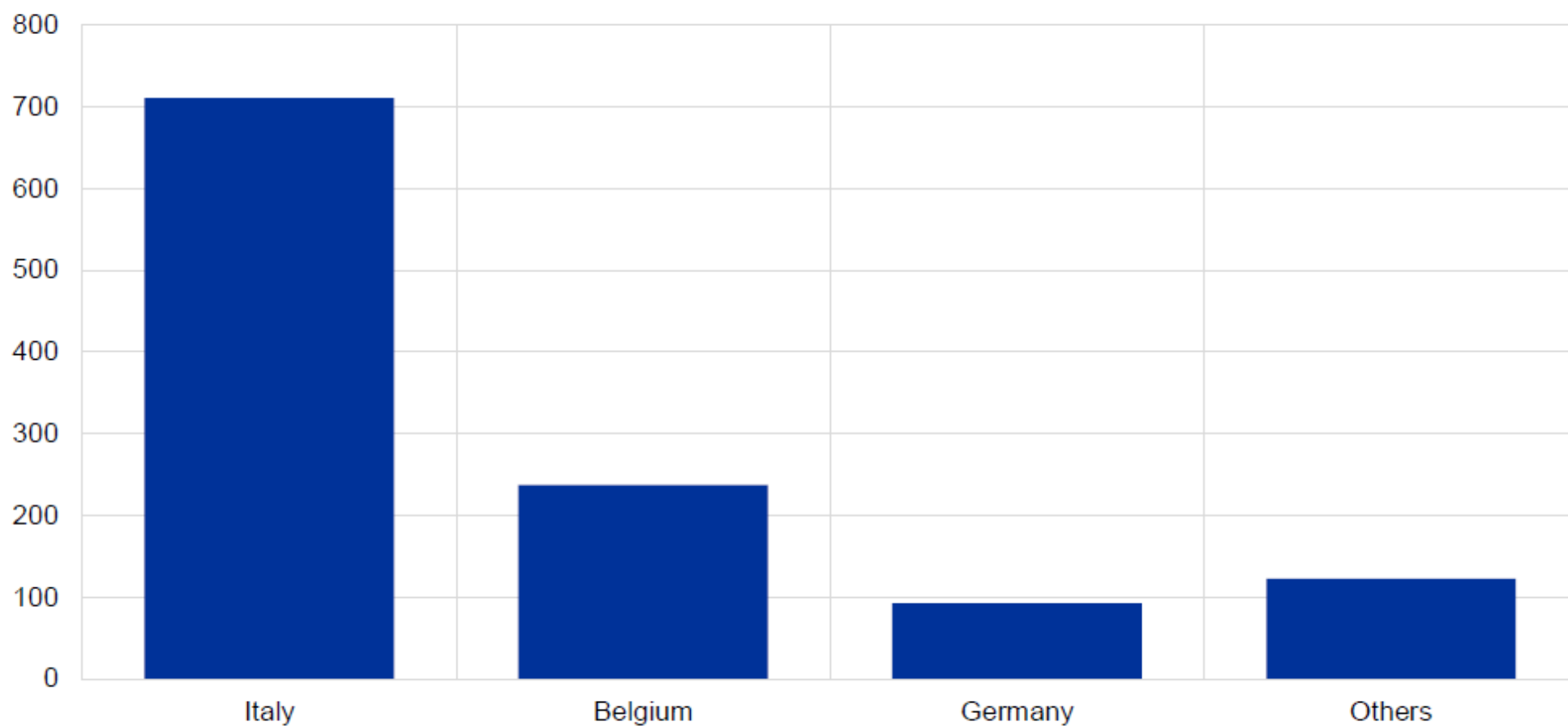
Agenda

1. Markets for Crypto Assets: ICOs/ STOs...
(Initial Coin Offering/ Security Token Offering)
2. Central Securities Depositories EU-Regulation (CSDR)
3. The German draft on Electronic Securities
Central Electronic Register vs. Crypto Securities Register
4. Three Forms of Securities – Two types digital securities ?
5. Conclusion

Belgium and Italy are key markets for crypto-asset investment vehicles

Euro area holders of bitcoin and ether based investment vehicles by country

(EUR millions)



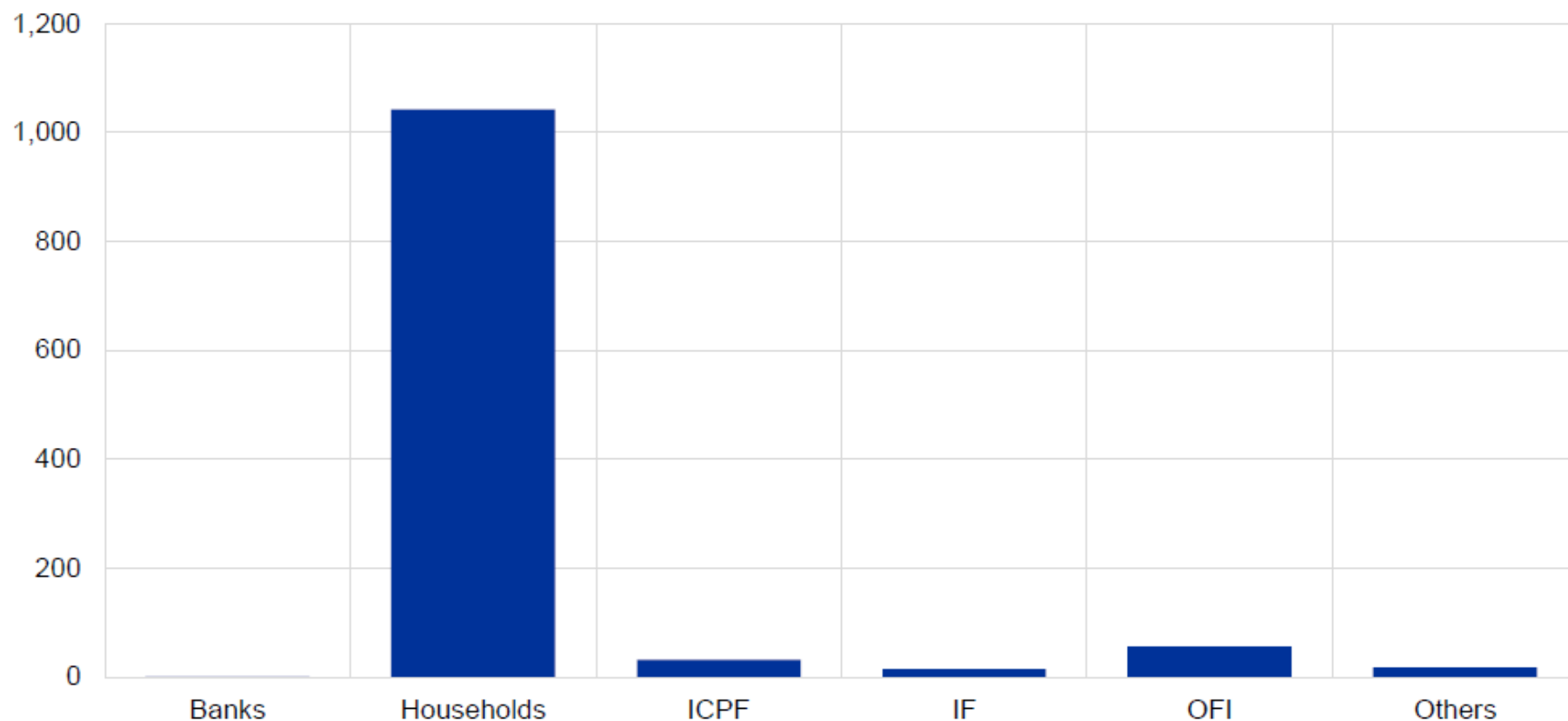
Sources: SHSS and ECB calculations.

Notes: Q3 2018.

Households are key holders of investment vehicles tracking bitcoin and ether

Euro area holders of bitcoin and ether-based investment vehicles by sector

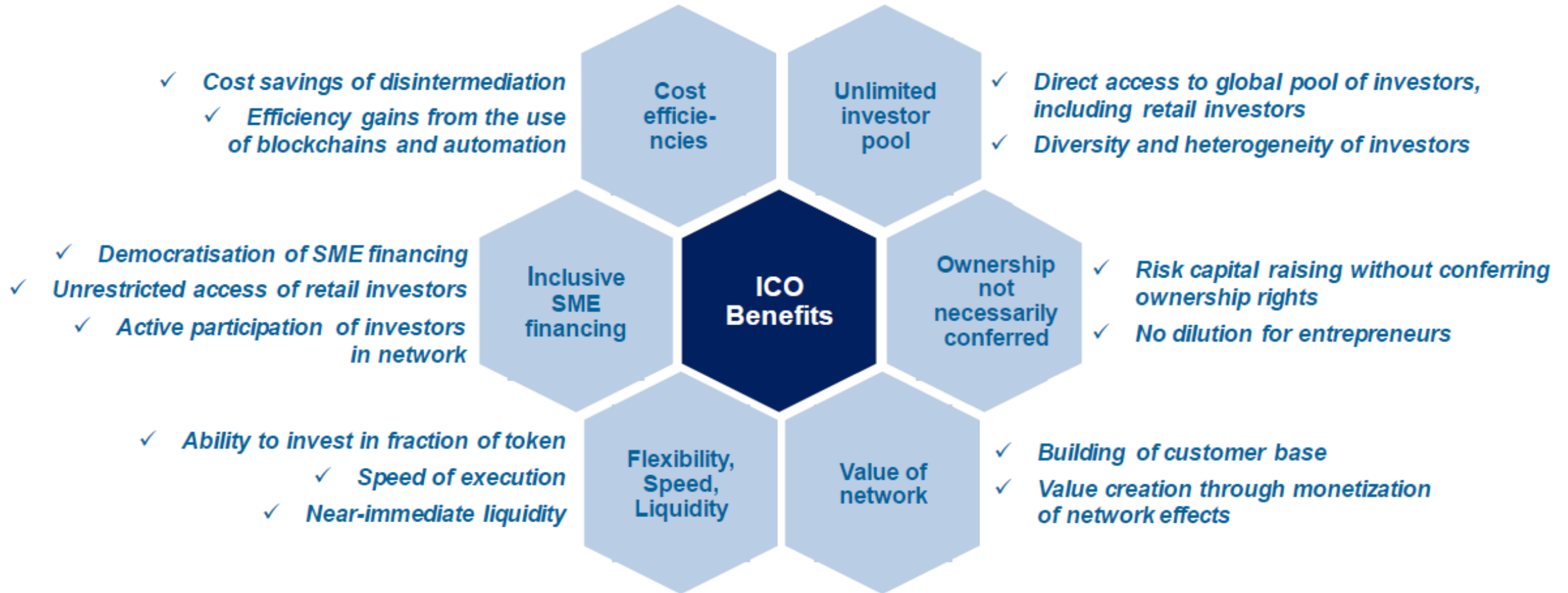
(EUR millions)



Sources: SHSS and ECB calculations.

Notes: Sector acronyms stand for insurance corporations and pension funds (ICPF), investment funds (IF), and other financial institutions (OFI). The category 'Others' captures all remaining sectors. Q3 2018.

Benefits of ICOs



Initial Public Offering vs. Initial Coins Offering

	IPO	ICO
Type of financing	<ul style="list-style-type: none">✓ Risk capital✓ After series D/potential VC exit	<ul style="list-style-type: none">✓ Risk capital✓ Early stage financing
Regulatory oversight	<ul style="list-style-type: none">✓ Regulated offerings✓ Extensive requirements around registration, marketing of offering, disclosure	<ul style="list-style-type: none">✓ Unclear regulatory framework
Investor pool	<ul style="list-style-type: none">✓ Sometimes restricted to accredited/ institutional investors	<ul style="list-style-type: none">✓ Unlimited – open to any and all investors
Trading in secondary markets	<ul style="list-style-type: none">✓ Regulated markets✓ Fixed trading sessions✓ Margin requirements for counterparty risk✓ Market rules for trading	<ul style="list-style-type: none">✓ Not always regulated trading✓ 24/7 trading✓ High counterparty risks✓ Extreme volatility

Regulation of Initial Coin Offerings

In recent years, large numbers of crypto tokens have been issued through Initial Coin Offerings (ICOs).

As a rule, these crypto tokens do not constitute securities, capital investments or other financial instruments as defined in the Securities Trading Act (*Wertpapierhandelsgesetz*).

This means that, in contrast to the future issuance of electronic securities, the issuance of such tokens is not subject to existing capital market rules.

Nevertheless, crypto tokens pose certain risks for investors.

Against this background, the key-issues paper addresses the possibility of regulating public offers of such tokens.

STO: Security Token Offering

- Security token offering (STO) is a fundraising tool similar to an ICO, but with certain regulations that hold the token issuers accountable for their actions.
- The relatively quick success of ICOs has established them as a viable method of crowdfunding. While ICOs have helped a lot of startups raise a great deal of money, the fundraising method also paved way for a variety of scams as there were little or no regulations involved.

Decoding Security Token Offerings (STOs)

- Blockchain technology has been evolving ever since it has gained popularity which was mostly due to Bitcoin in the early stages. Now, with the developments in the smart contracts, security tokens have come into existence with the sole purpose of establishing themselves as the new use case for
- real-time digital assets that operate within the legal boundaries.

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The value chain of CDR

CSDR: the highlighted parts of the value chain are affected



Pre-trading

- Index business
- Data business

- Information technology

Trading & clearing

- Financial derivatives
- Commodities
- Currency trading
- Securities trading

Post-trading

- Post-trading (settlement and custody)
- Investment fund services
- Collateral management

Central Securities Depositories Regulation (CSDR)

- The European Central Securities Depositories Regulation (CSDR) is one of the key regulations
- adopted in the aftermath of the 2008 financial crisis. The CSDR will ensure that settlement is
- carried out in a safer and more efficient manner in Europe.
- supports the harmonising of securities settlement and prudential rules for CSDs
- across Europe in order to enhance market safety and create a level playing field.

CSDR on national and european level

- CSDs are already highly regulated entities on the national level. However, this is not the case on the European level.
- Given this lack of harmonised regulation and the fact that trading facilities and
- central counterparties (CCPs) are already regulated under MiFID, (and soon MiFIR) under EMIR,
- respectively – the European Commission prepared a regulatory framework for CSDs – the CSDR.

Regulation developments 2014-2020 (History)

The regulation (Level 1) entered into force on 17 September 2014 as a result of the financial crises of 2008

In March 2017, the technical regulatory standards for the CSD requirements as well as the internalised settlement were adopted, which entered into force in March 2019.

By the end of September 2017, CSDs could submit their applications to the competent national authorities, on which a decision was taken in 2018. In May, the technical regulatory standards for the settlement discipline were adopted, which are to be applied from September 2020.

In May 2019, the reporting obligations for internalised settlement came into force.

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Gesetz zur Einführung von elektronischen Wertpapieren (eWpG)

- After having published its blockchain strategy in September 2019, the German Government has now taken a first step to deliver on its promise to allow electronic and blockchain based securities¹ and issued a draft law introducing digital securities (**Gesetz zur Einführung von elektronischen Wertpapieren**, “eWpG”).
- For now, the eWpG introduces two types of digital bonds only. The limitation of the eWpG to digital bonds is intended as a test phase. The German Government intends to extend the eWpG to cover other securities, such as stocks or investment fund units, at a later time after gaining some experience with digital bonds.
- The German Government aims at having the final law passed by the end of 2020

Key-issues paper on the regulatory treatment of electronic securities and crypto tokens

- The Federal Ministry of Finance and the Federal Ministry of Justice and Consumer Protection have jointly
- published a key-issues paper discussing the possible introduction of electronic securities and the regulation
- of public offers of certain crypto tokens. The paper forms part of efforts to strengthen Germany's role as one
- of the world's leading digital technology and fintech locations

Potential for private and public sectors

- Electronic securities have the potential to increase operational efficiency and accuracy both in compliance and supervision, namely, corporate governance, audit, and surveillance by deploying RegTech and SupTech systems.
- Digital transformation in the financial sector should include considerations in line with the digital finance requirements, such as closing the technology gap between the private and public sectors and managing asymmetric technology risks.

Traditional Paper-based Securities Framework

- To date, German law generally requires most securities to be paper-based, i.e., when new securities are issued a physical certificate either in the form of a global certificate (*Globalurkunde*)
- or in the form of an individual certificate (*Einzelurkunde*) needs to be issued. The rules governing the transfer of such securities are the same rules that govern in-rem transfers of objects. This means that the securities holder acquires the rights embodied in the securities certificate by way of acquiring the ownership, or in the case of a global certificate, the co-ownership in the certificate. This principle is also described as “the right from the paper follows the right on the paper” (*das Recht aus dem Papier folgt dem Recht am Papier*).
- The eWpG now dematerializes the securities but subjects them to the same rules as traditional paper-based securities.

Two Types of Digital Securities

Although the idea of introducing digital securities is part of the German Government's blockchain strategy, the eWpG takes a two-pronged approach by introducing two relatively different types of digital securities:

- **Electronic Securities:** digital securities that will be registered in a central securities register and that use the same custody and trading infrastructure as traditional paper-based securities; and
- **Crypto Securities:** digital securities that will be registered in a crypto securities register and that will require an entirely new custody and trading infrastructure based on distributed ledger technology (“DLT”) or similar technology, yet to be developed.

Central Electronic Register

The central electronic register must be administered by a central securities depository (“CSD”), which is licensed in accordance with Article 16 of the Central Securities Depository Regulation (“CSDR”) and provides its core services as set out in the CSDR in Germany.²

Upon the registration of the Electronic Securities in the central electronic register, they will be incorporated into the existing book entry system (*Effektengiroverkehr*) of the CSD. This will enable the Electronic Securities to be traded in the same way as traditional securities on the German and EU capital markets venues. As with traditional securities, the CSD will become the legal owner of the registered Electronic Securities but will hold them as a trustee for the benefit of the beneficial owners.

Crypto Securities Register

The crypto securities register must be administered by a licensed crypto custody service provider, or by the issuer itself, provided that the issuer has obtained the required regulatory license.

As opposed to central electronic registers, crypto securities registers allow global entries as well as single entries for individual holders. It is expected that the single entries approach will prevail for Crypto Securities as this will allow utilization of one of the key advantages of a blockchain based system—the reduction of the need for intermediaries.

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Forms of Securities

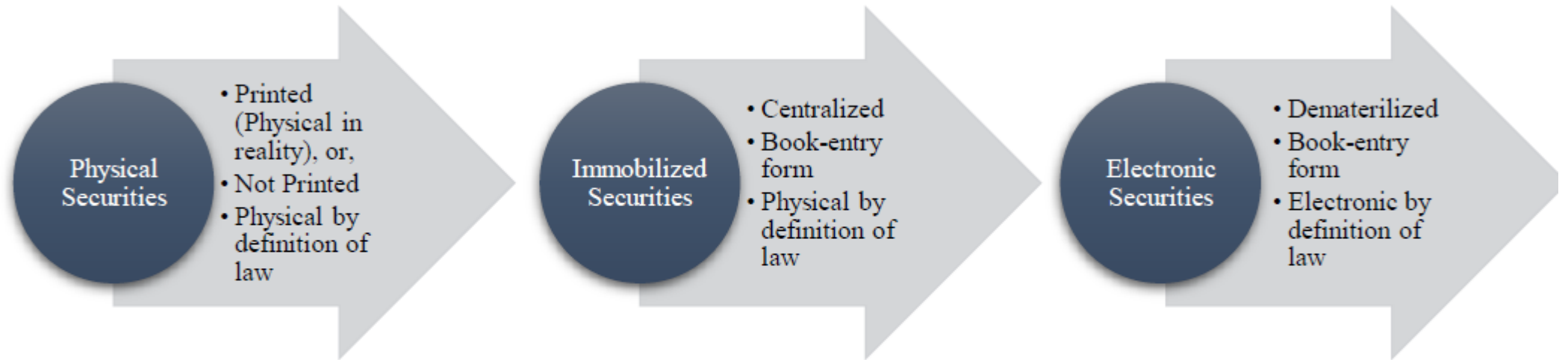


Figure 1: Three Forms of Securities.

Differences: Electronic vs. Crypto Securities

- A key difference of the Crypto Securities infrastructure from the Electronic Securities infrastructure is that the crypto securities register will register the initial issuance of Crypto Securities and any subsequent transfers of such securities to new holders.
- The central electronic registers, in contrast, will only record the initial issuance of Electronic Securities, but any further transfers of such securities will be recorded by way of book entries in the existing book-entry system (*Effektengiroverkehr*) of the CSD.

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Conclusion

- Germany's draft regulation is a strong signal for digital transformation in Germany; however, it does not foresee a fully dematerialized system, a prerequisite for well-designed RegTech and SupTech systems.
- ...