



Syndicated loans on blockchain

Tokenizing syndicated loans on
an ethereum blockchain

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Loan Syndication is the process of distributing a portion of a loan to a group of lenders when a borrower requires an amount **too large** or otherwise **outside the risk appetite of a single lender**



\$3,250B

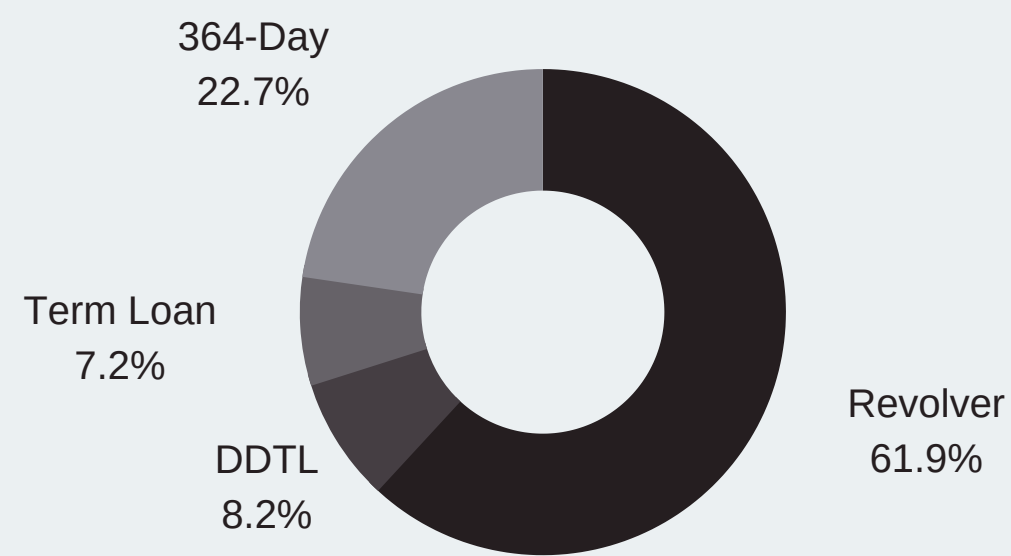
VOLUME OF LOANS
SYNDICATED
GLOBALLY IN 2020,
ACCORDING TO
REFINITIV LPC

\$10-15B

ESTIMATE OF FEES
PAID TO
ARRANGERS,
UNDERWRITERS,
PARTICIPANTS IN
THE SYNDICATION
PROCESS, PER
ANNUM

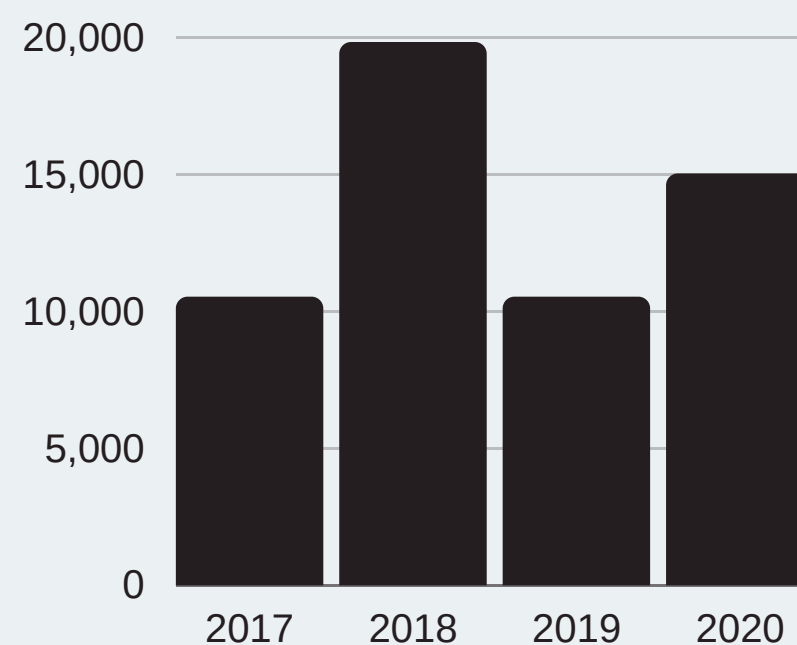
MARKET STRUCTURE

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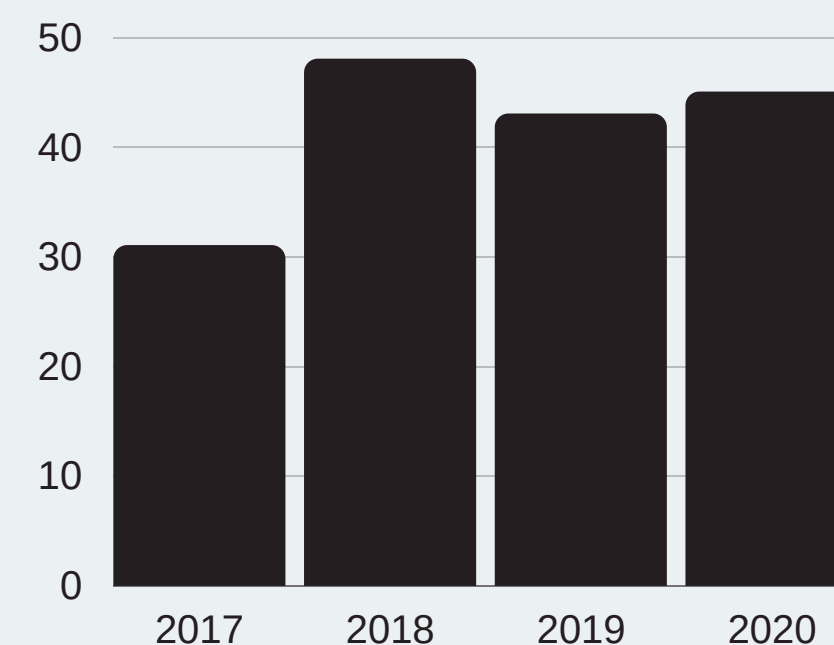
LOAN TYPE

as % total volume (IG)
recorded by Refinitiv
(excludes bridge facilities)



DEAL SIZE (\$M)

Largest IG deal size
recorded by year



BANK GROUP SIZE

Largest syndication
recorded by year

364-DAY AND REVOLVERS

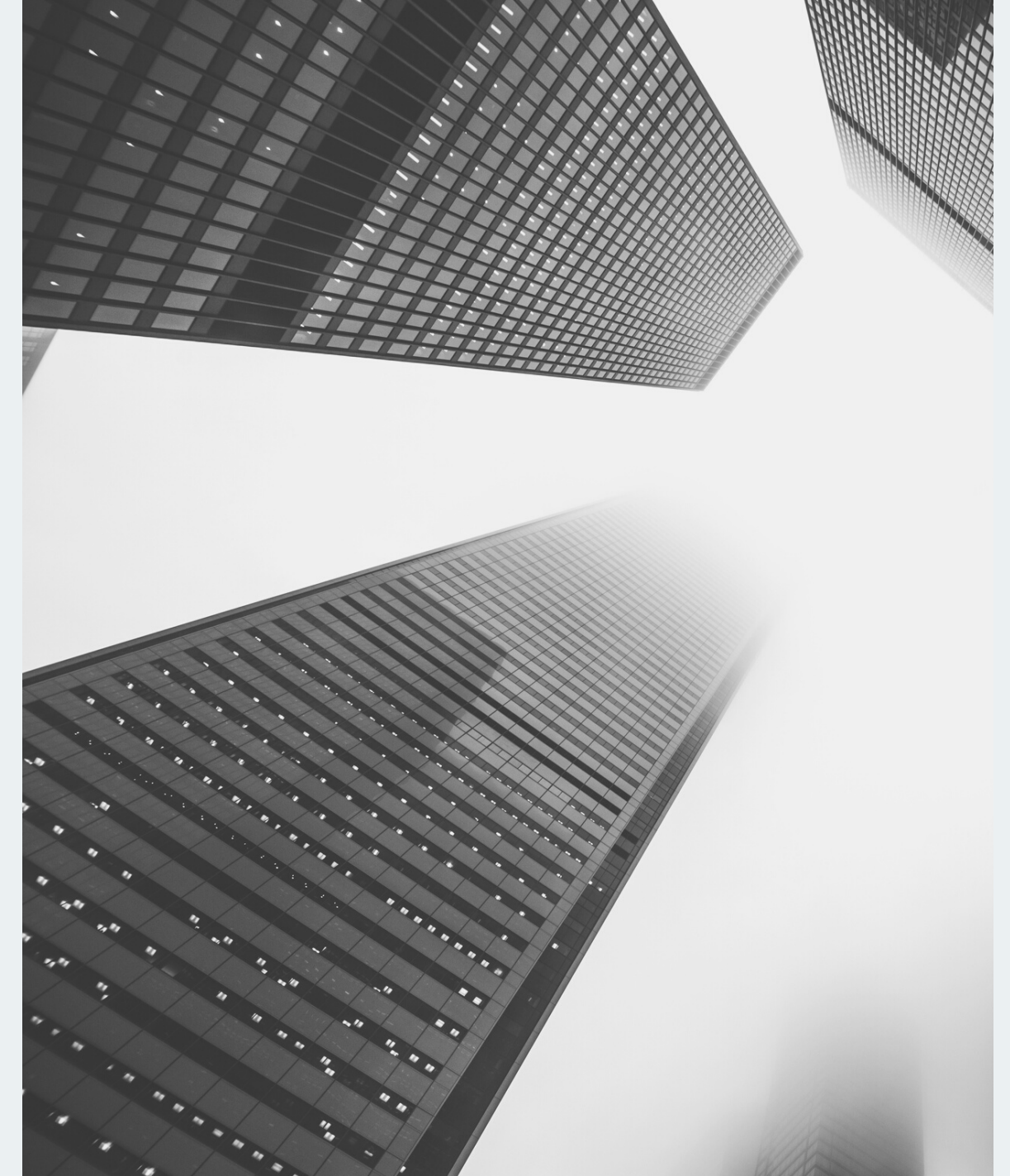
Account for 83% of the IG loan volume syndicated in North America over last 5yrs

LARGE DEAL ~\$15BN

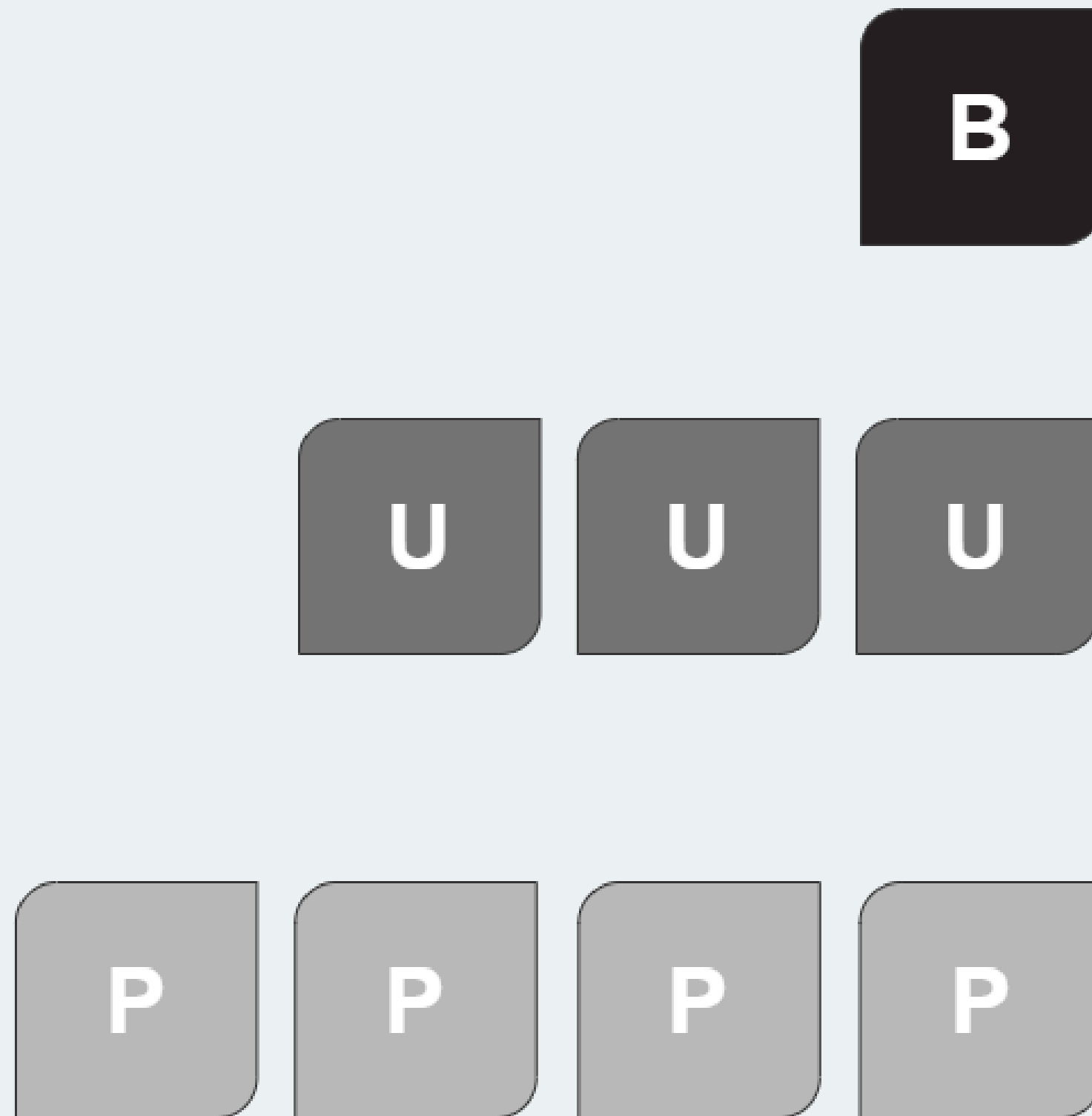
May be made up of multiple tranches

LARGE SYNDICATE ~40 BANKS

Multi-billion dollar loans require large bank groups



SYNDICATION ROLES



BORROWER

Looking to borrow a large amount of money that a single bank may find difficult to fund owing to volume, concentration and counterparty risk considerations

ARRANGER/UNDERWRITER

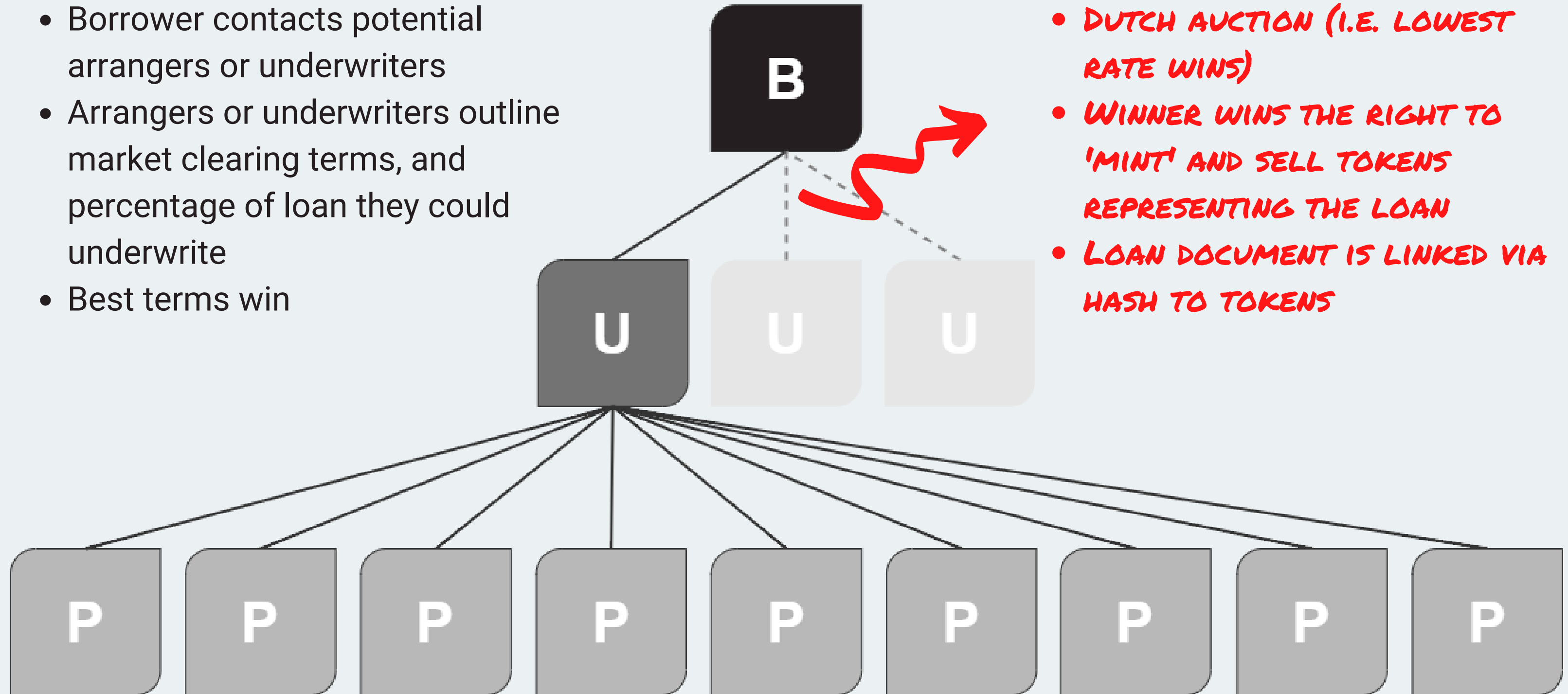
Performs borrower and market diligence; offers to underwrite a pricing structure believed to be market clearing; large balance sheet can absorb an undersubscribed loan ('failed syndication')

SYNDICATE PARTICIPANTS

Purchase tranches of the loan which mitigates the risk but still gives them exposure

ARRANGING AND UNDERWRITING

- Borrower contacts potential arrangers or underwriters
- Arrangers or underwriters outline market clearing terms, and percentage of loan they could underwrite
- Best terms win

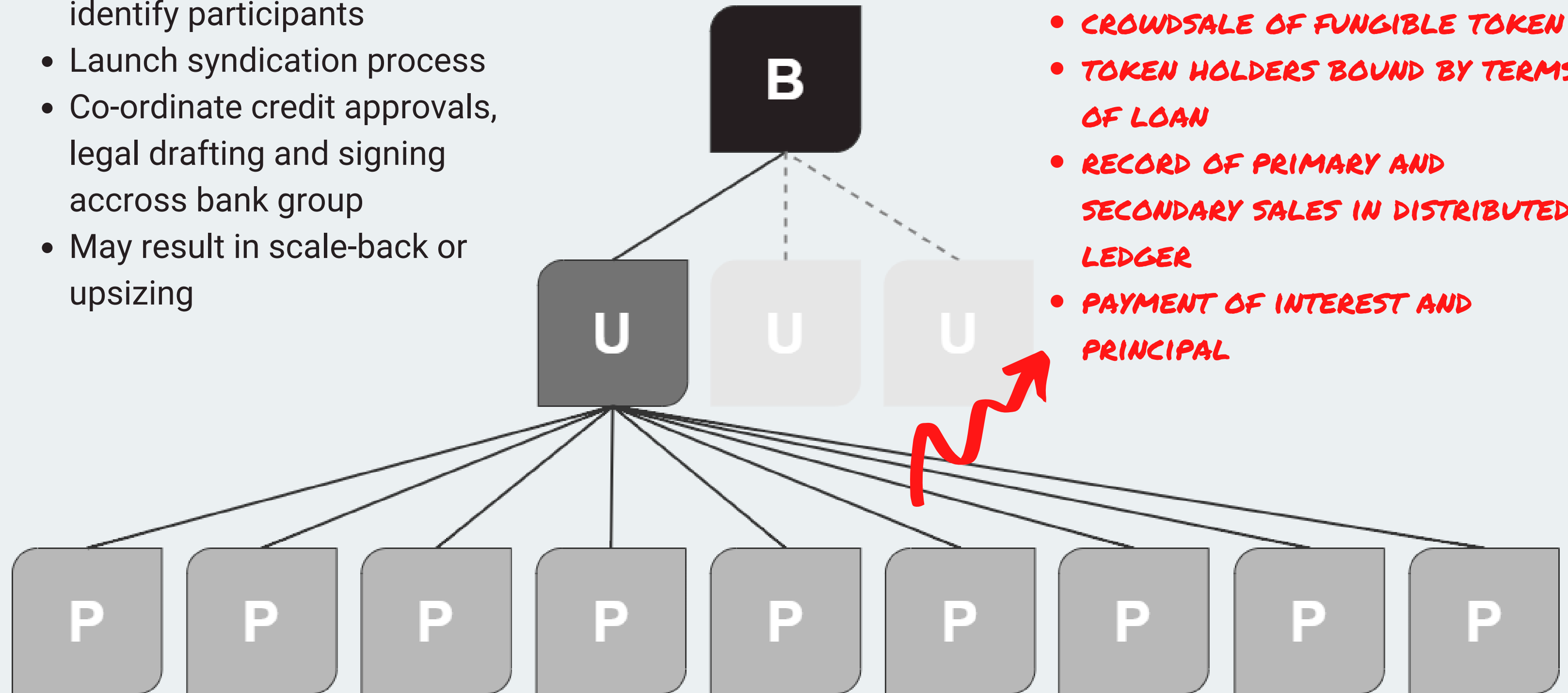


SMART CONTRACT: AUCTION

- DUTCH AUCTION (I.E. LOWEST RATE WINS)
- WINNER WINS THE RIGHT TO 'MINT' AND SELL TOKENS REPRESENTING THE LOAN
- LOAN DOCUMENT IS LINKED VIA HASH TO TOKENS

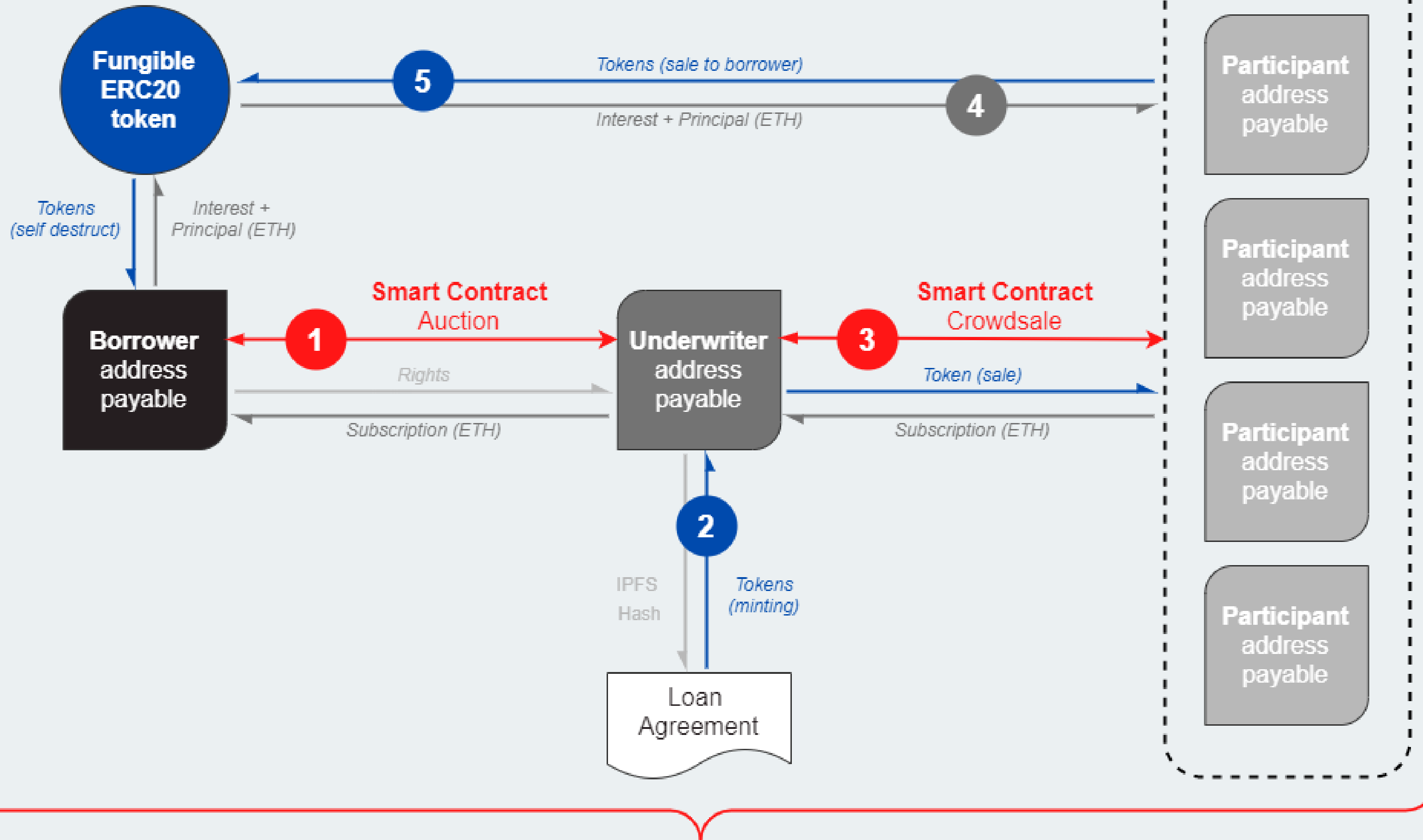
SYNDICATION

- Arrangers or underwriters identify participants
- Launch syndication process
- Co-ordinate credit approvals, legal drafting and signing accross bank group
- May result in scale-back or upsizing



SMART CONTRACT: CROWDSALE

- CROWDSALE OF FUNGIBLE TOKEN
- TOKEN HOLDERS BOUND BY TERMS OF LOAN
- RECORD OF PRIMARY AND SECONDARY SALES IN DISTRIBUTED LEDGER
- PAYMENT OF INTEREST AND PRINCIPAL





ADVANTAGES

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■ **TRANSPARENT**

For potential borrowers, underwriters and participants

■ **AUTOMATED**

Administering, coordinating and closing the underwriting, syndication and settlement process

■ **LIQUID**

Tokenization of the loan via ERC20 or ERC721 standard should allow for secondary trading and settlement

■ **AUDITABLE**

Auction, crowdsale and secondary market transactions in tokens are verified by blockchain participants, and recorded on a distributed ledger

Challenges

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■ LOAN TYPES

Needs to support several syndication and product types (e.g. underwrite, best efforts, or club on term loan, revolving or bridge facilities)

■ PERIODICITY

No native periodic payment automation or termination i.e. functions only be executed when something/someone calls them

■ NON-INTEGERS

Solidity does not support float (i.e. non integer values) or fractions

■ STABLECOIN

Exposure to USDETH or EURETH exchange rate risk

Challenges

WORK IN PROGRESS

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LOAN TYPES

Needs to support several syndication and product types (e.g. underwrite, best efforts, or club on term loan, revolving or bridge facilities)

BUILD-OUT

NON-INTEGERS

Solidity does not support float (i.e. non integer values) or fractions

BPS

PERIODICITY

No native periodic payment automation or termination i.e. functions only be executed when something/someone calls them

WEBS (PY)
SOLUTION?

STABLECOIN

Exposure to USDETH or EURETH exchange rate risk

PEGGED DIGITAL
CURRENCY?

CONTACT



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PRODUCED WITH THANKS
TO NIKA CHAN, BEN
FISCHLER, ELI HOLDEN,
AND ARTHUR MORAN

Philip Waddilove • March 2021