

Smart Financial Contracts: The Basic Building Blocks of the Future Digital Banks

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Definition of “Smart Contract”

Financial Sector

Financial Contracts

Standardized Smart Financial Contracts

The New World of Finance



- Smart contracts are “a set of promises, specified in digital form, including protocols within which the parties perform on the other promises”
- Four basic objectives:
 - Observability
 - Verifiability
 - Privacy
 - Enforceability

Nick Szabo, Building Blocks for Digital Markets

http://www.alamut.com/subj/economics/nick_szabo/smartContracts.html (retrieved 20180822)



- Efficiency
- Transparency
- Inclusion
- Disintermediation

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BANK

Analysis Level

Financial Analysis $i = f(\text{SC}[\text{Cash-Flows}], \dots)$
 RISK FINANCE

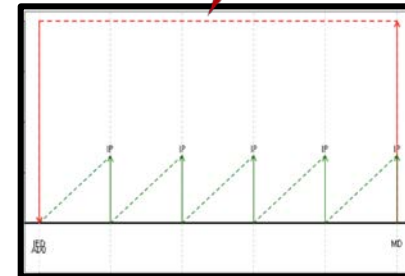
Expected CFL's under forecasted conditions



Transaction Processing Level

Real exchanged CFL's

Under current conditions



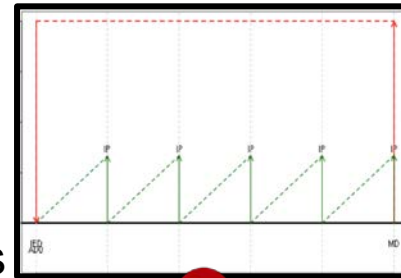


BANK

Analysis Level

Financial Analysis $i = f(\text{SC}[\text{Cash-Flows}], \dots)$

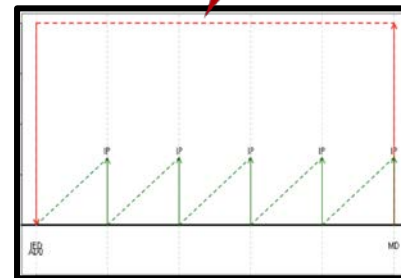
Expected CFL's under forecasted conditions



Transaction Processing Level

Real exchanged CFL's

Under current conditions



Cost Ratio

>50%

<50%

Cost Saving Potential ~80%

Cost Saving Potential ~30%



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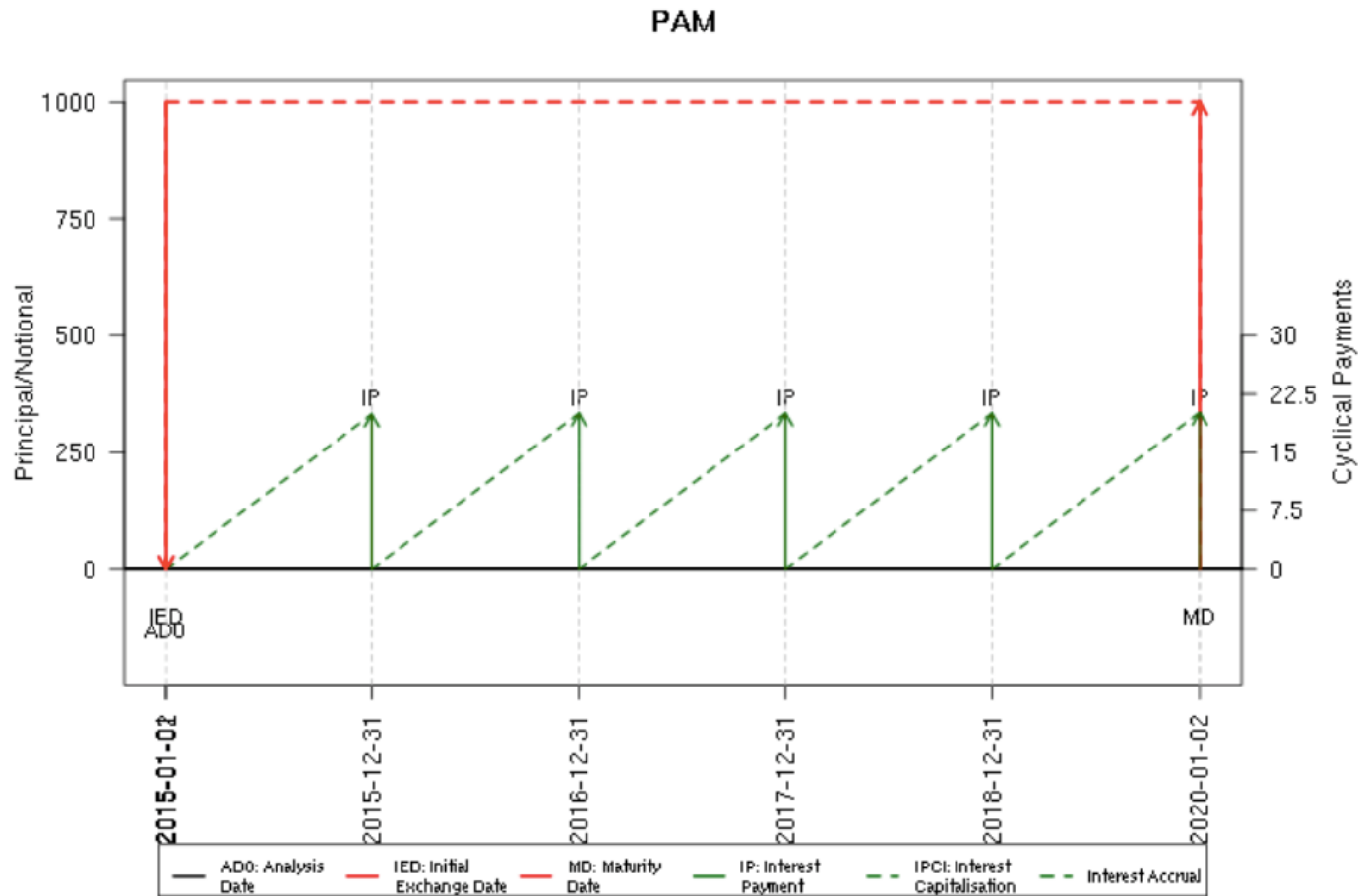
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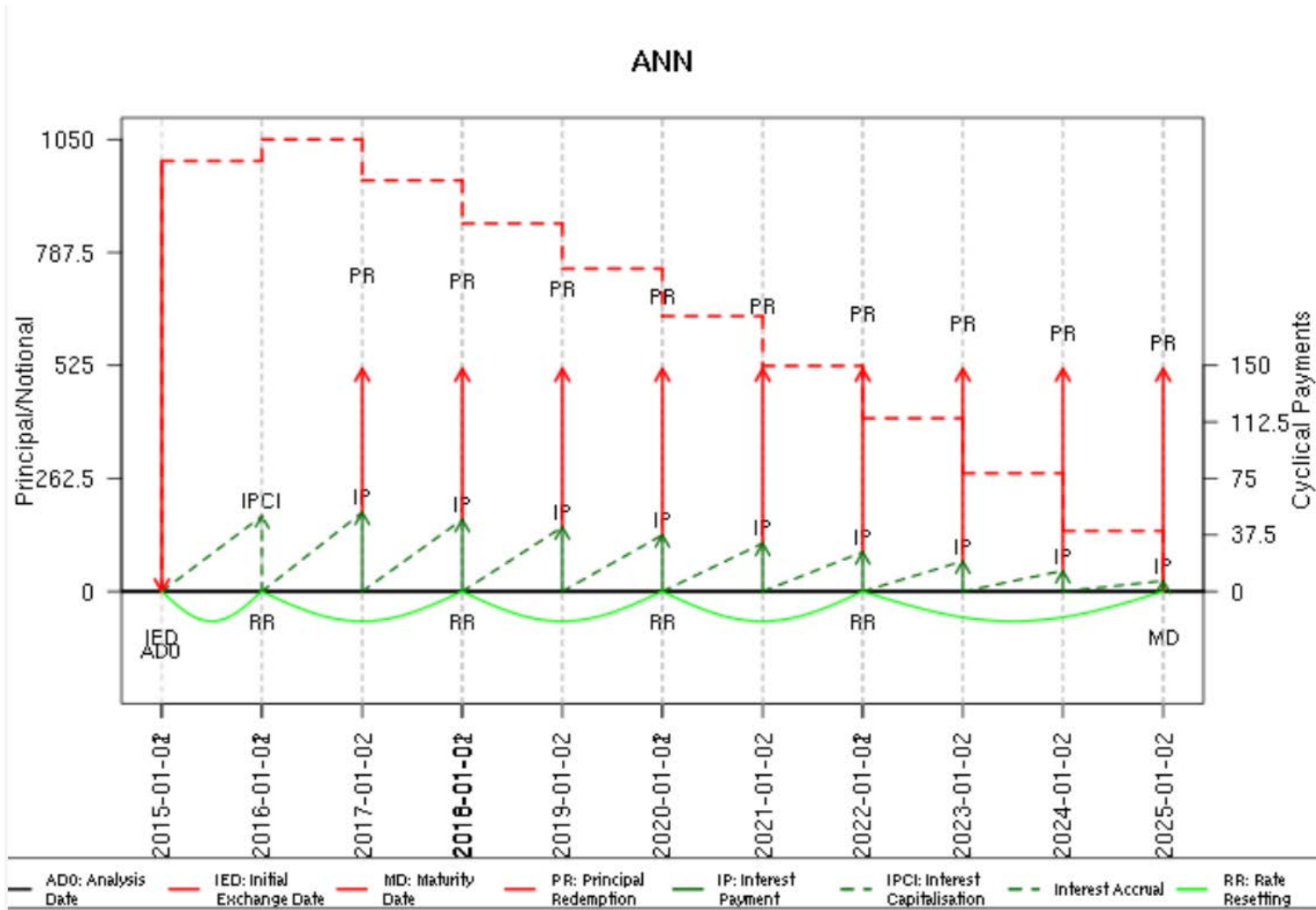


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Bank shall pay the sum of 1000 USD on 2013.01.01 (date)
to Mr. Smith (obligor). Obligor will pay an interest of 10 % on a
semi-annual basis and repay the full amount in 3 years.

Date, Signature





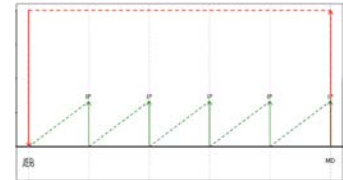
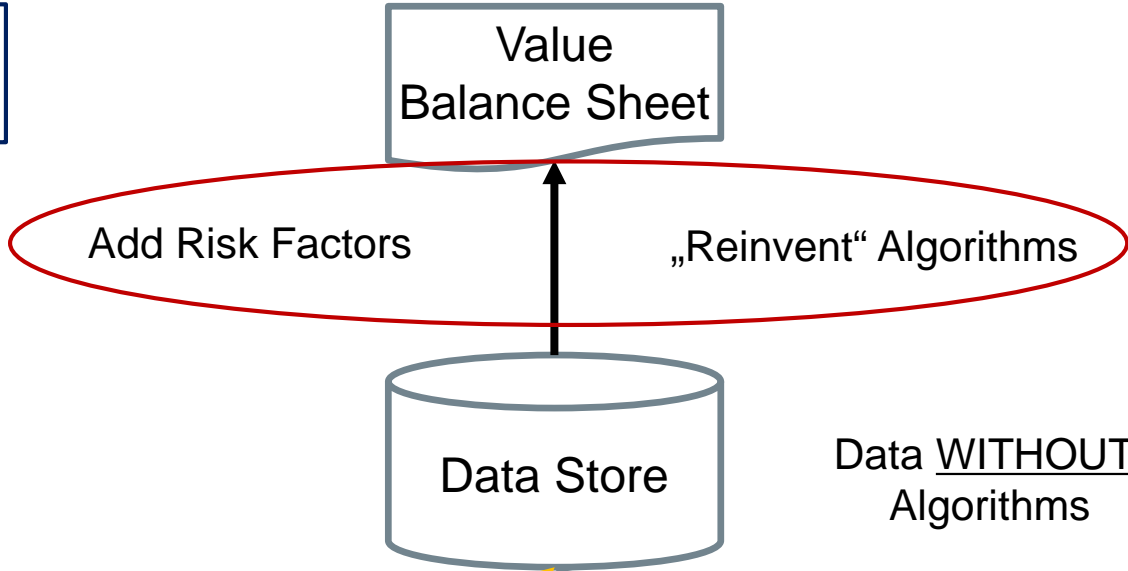


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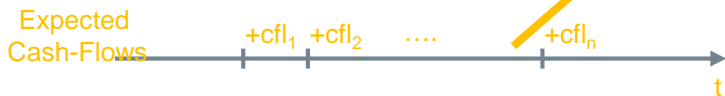
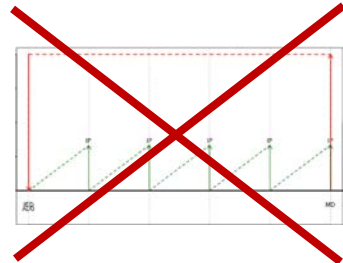
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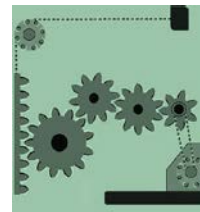
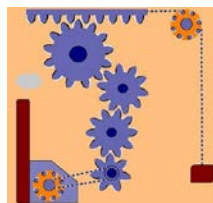
Analysis Level



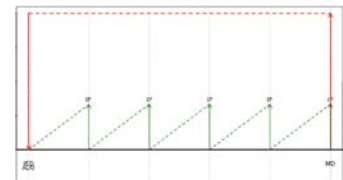
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Transaction Processing



Data AND Algorithms



Definition of “Smart Contract”

Financial Sector

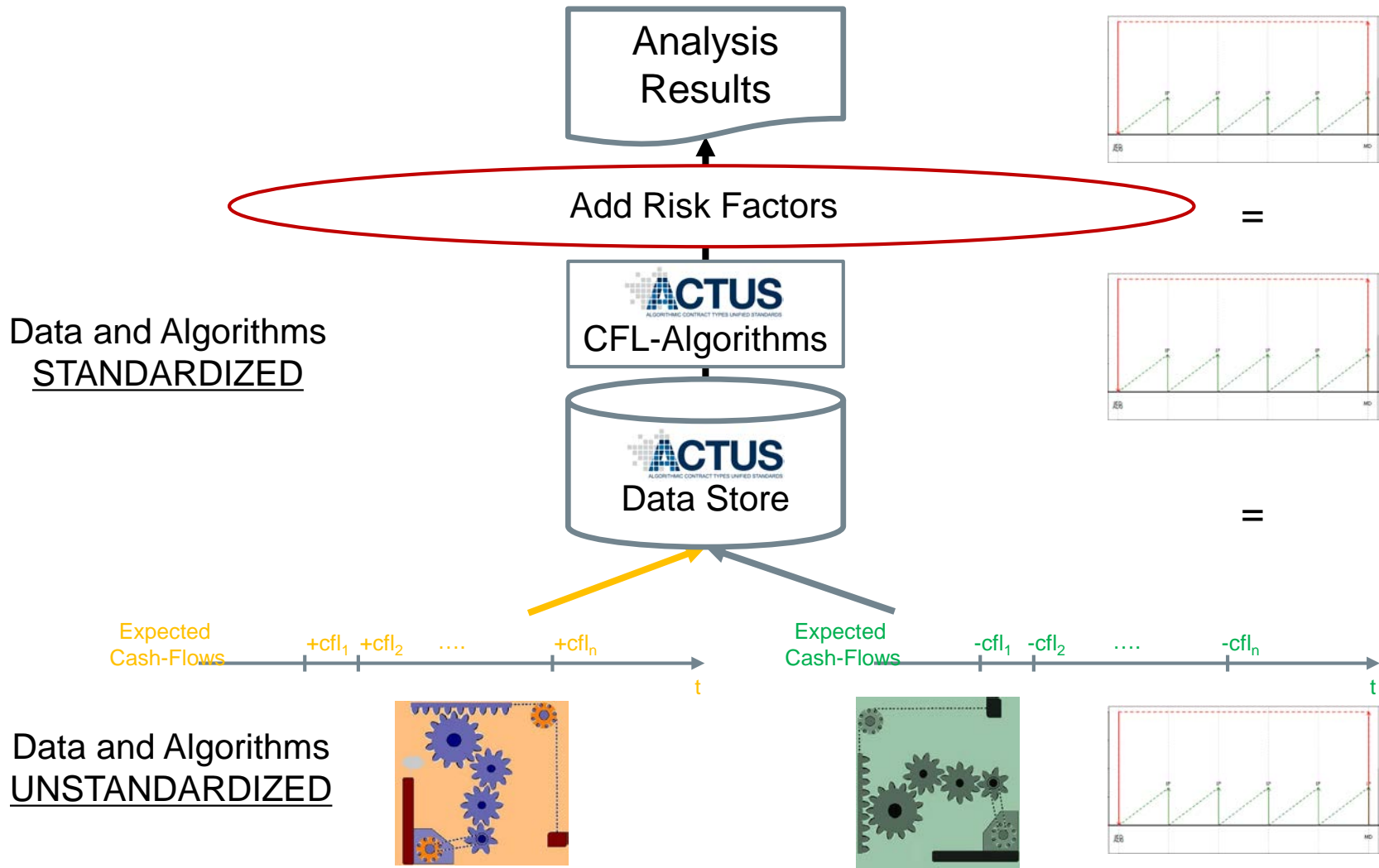
Financial Contracts

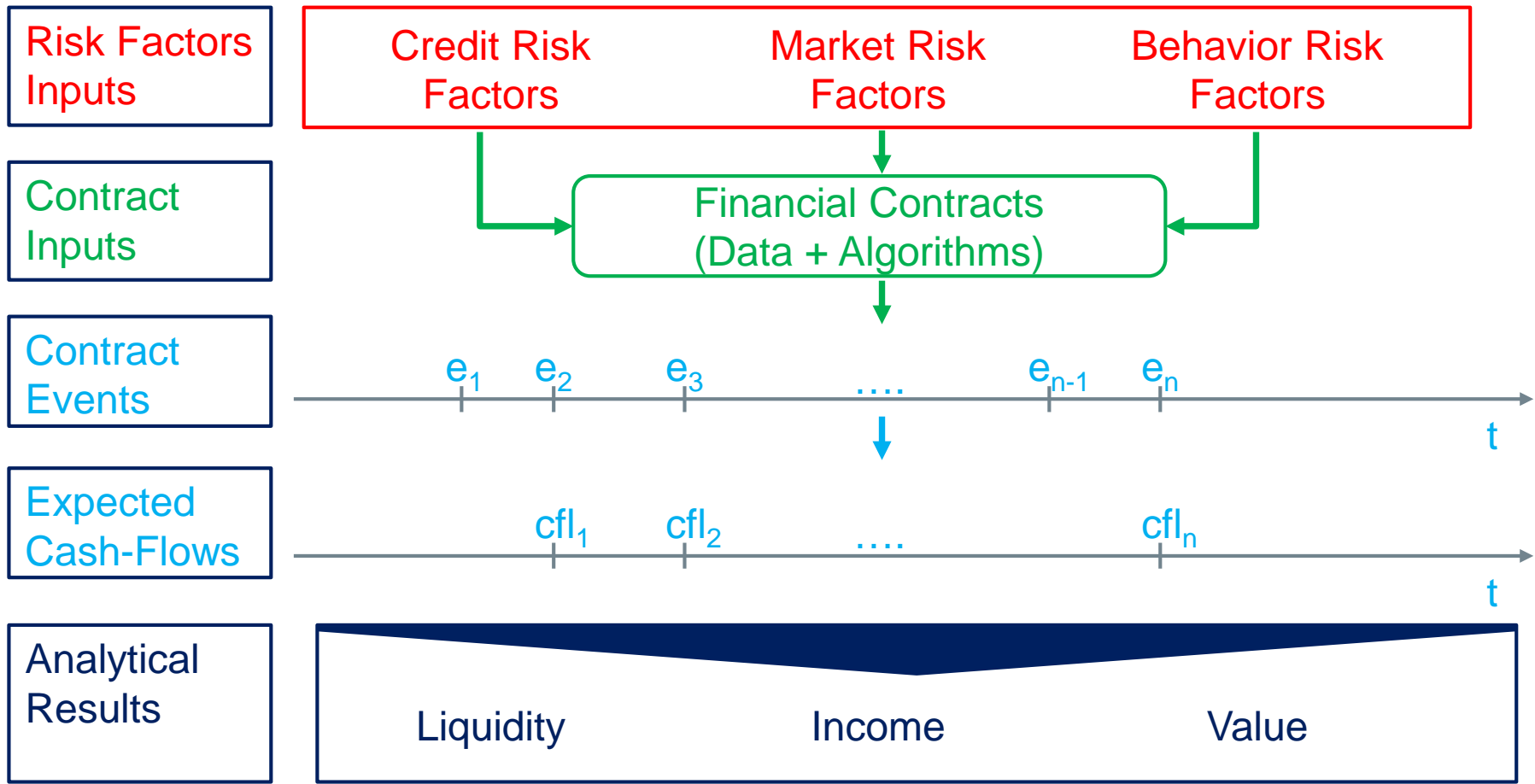
Standardized Smart Financial Contracts

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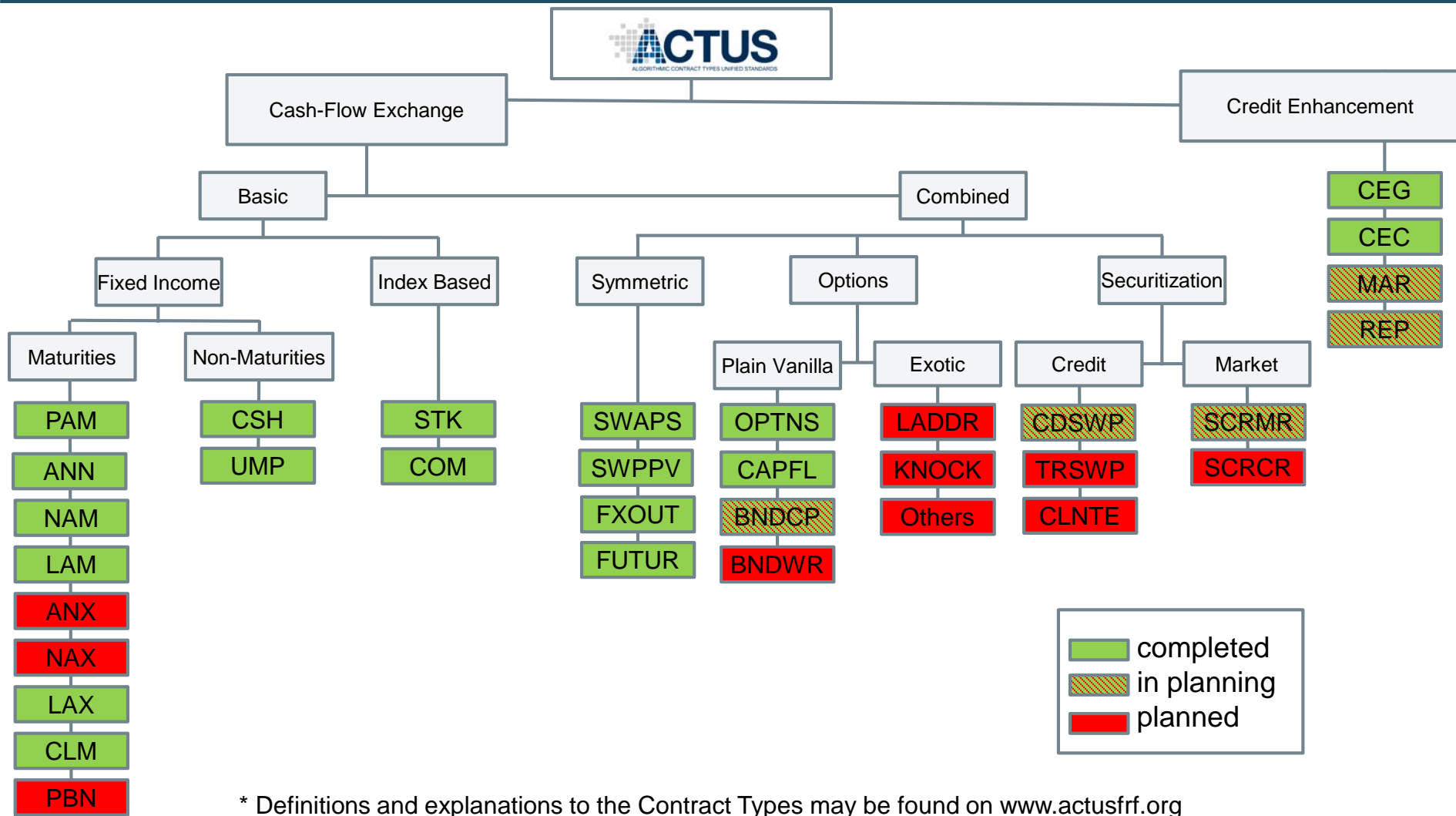
www.projectactus.org





ACTUS Contract Types

Overview, State of Development



* Definitions and explanations to the Contract Types may be found on www.actusrf.org



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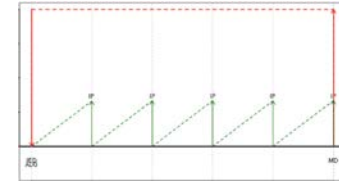
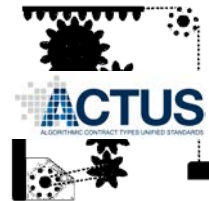
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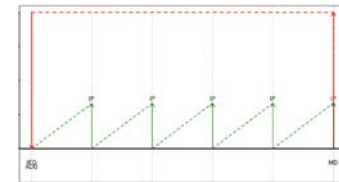
Analysis Results



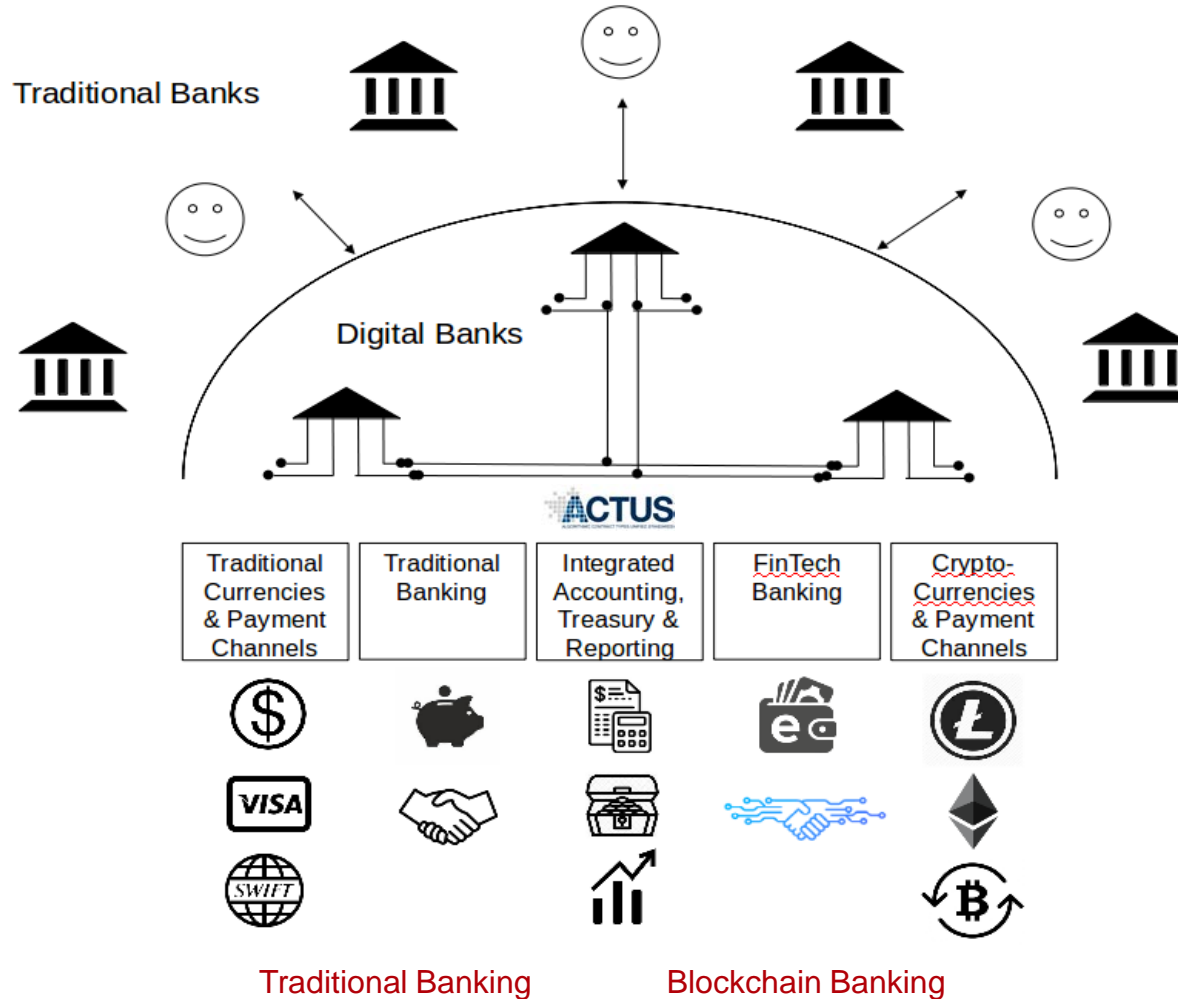
Add Risk Factors

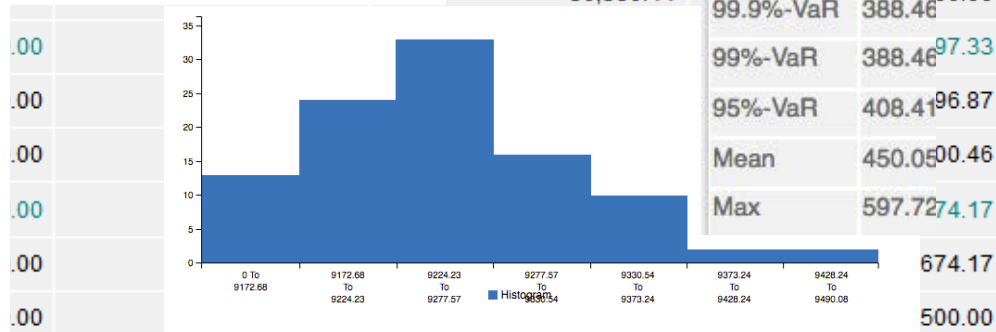
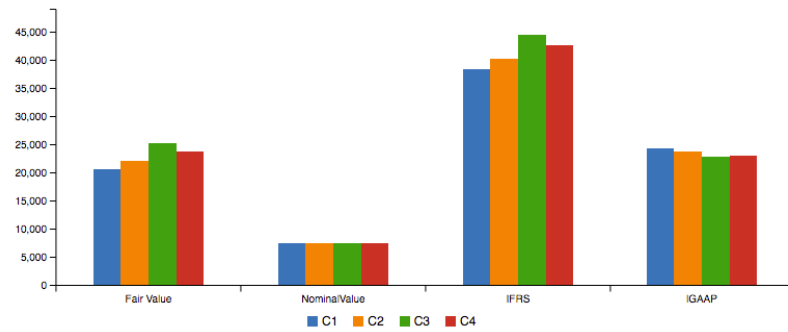
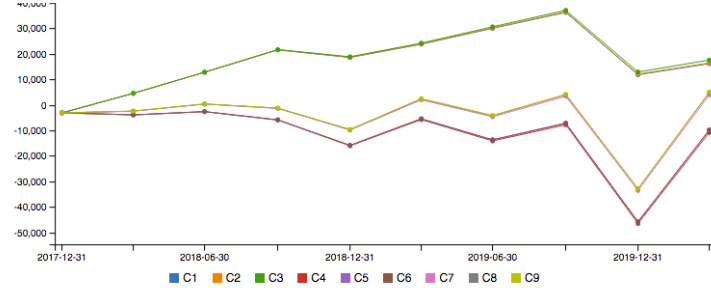
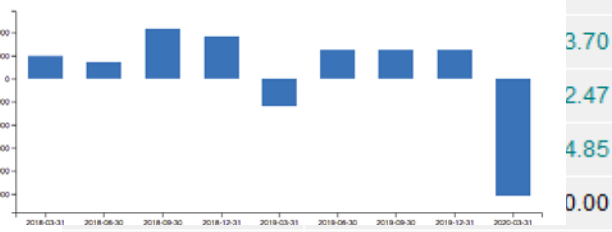
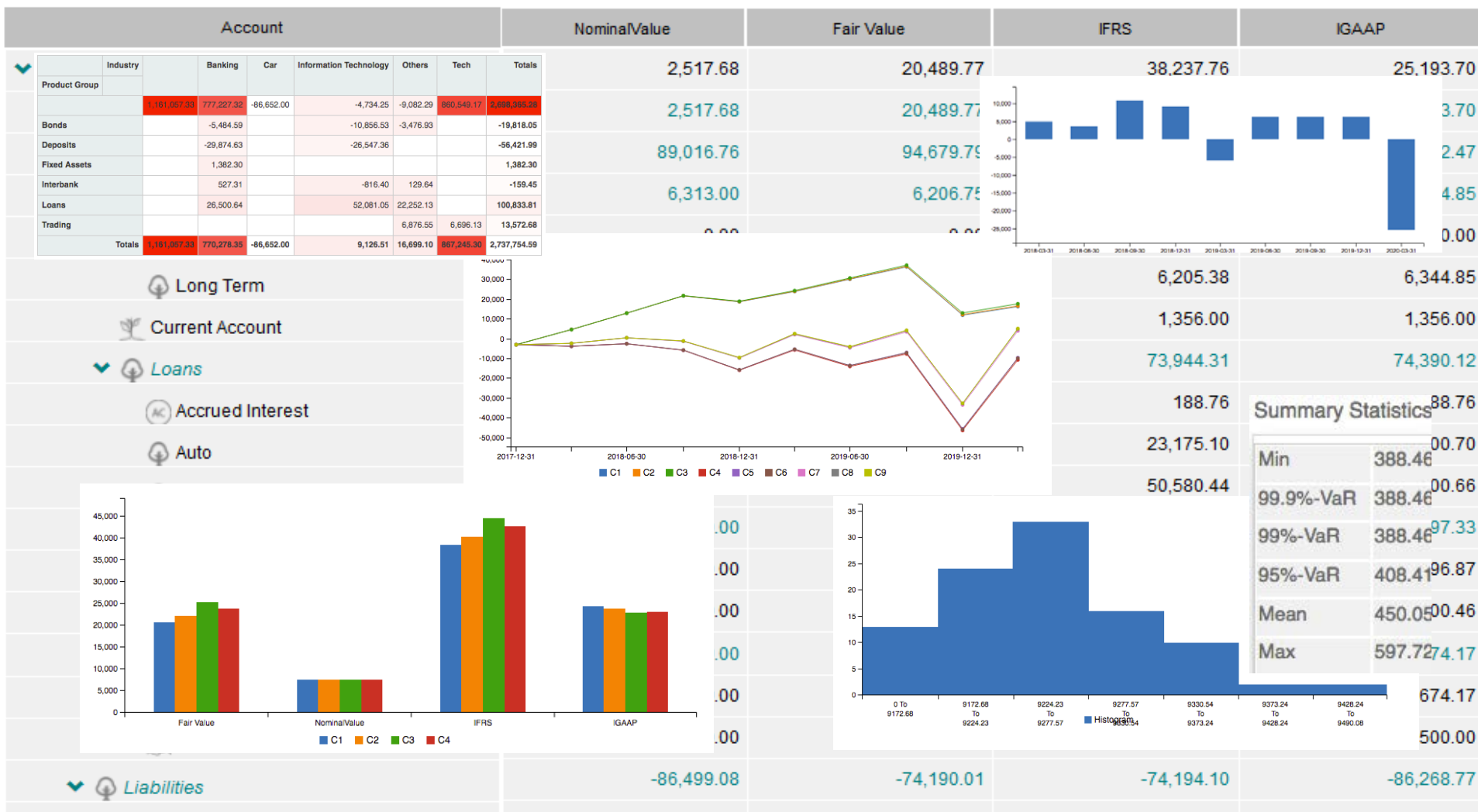


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Data and Algorithms
ACTUS STANDARD





www.projectactus.org

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