



FNA

OFR-FRBC 2018 Financial Stability Conference  
“Interconnectedness & Networks” Panel

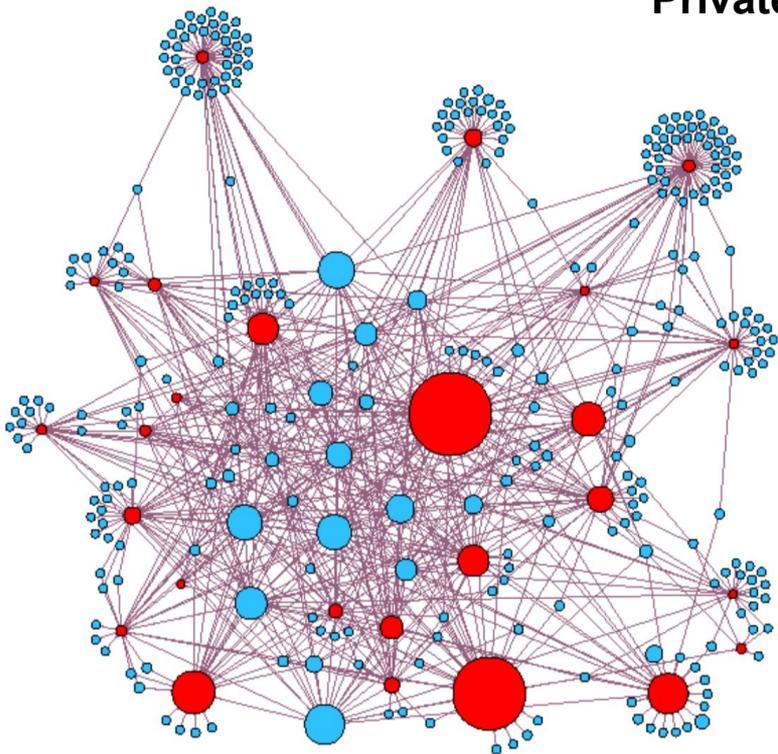
Washington DC, 29-30 November 2018  
Phillip Straley, President

[www.fna.fi](http://www.fna.fi)

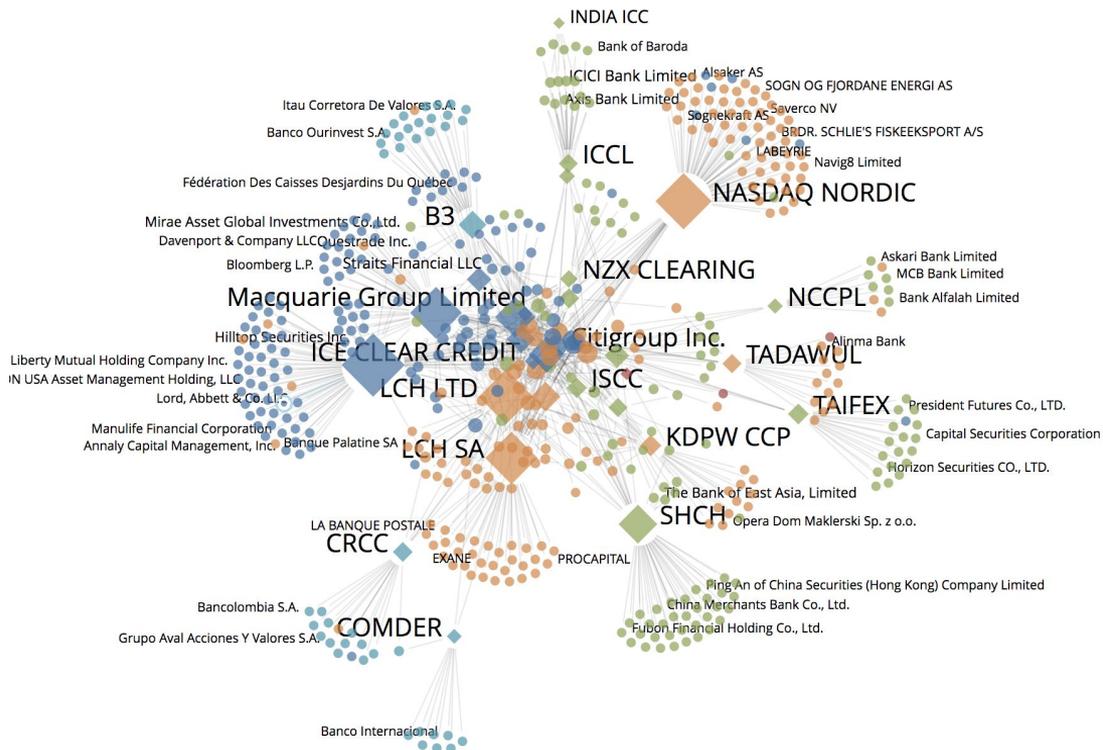


# Illustration: Mapping the global network of CCPs

## Private vs. Public Data



BIS (2018)



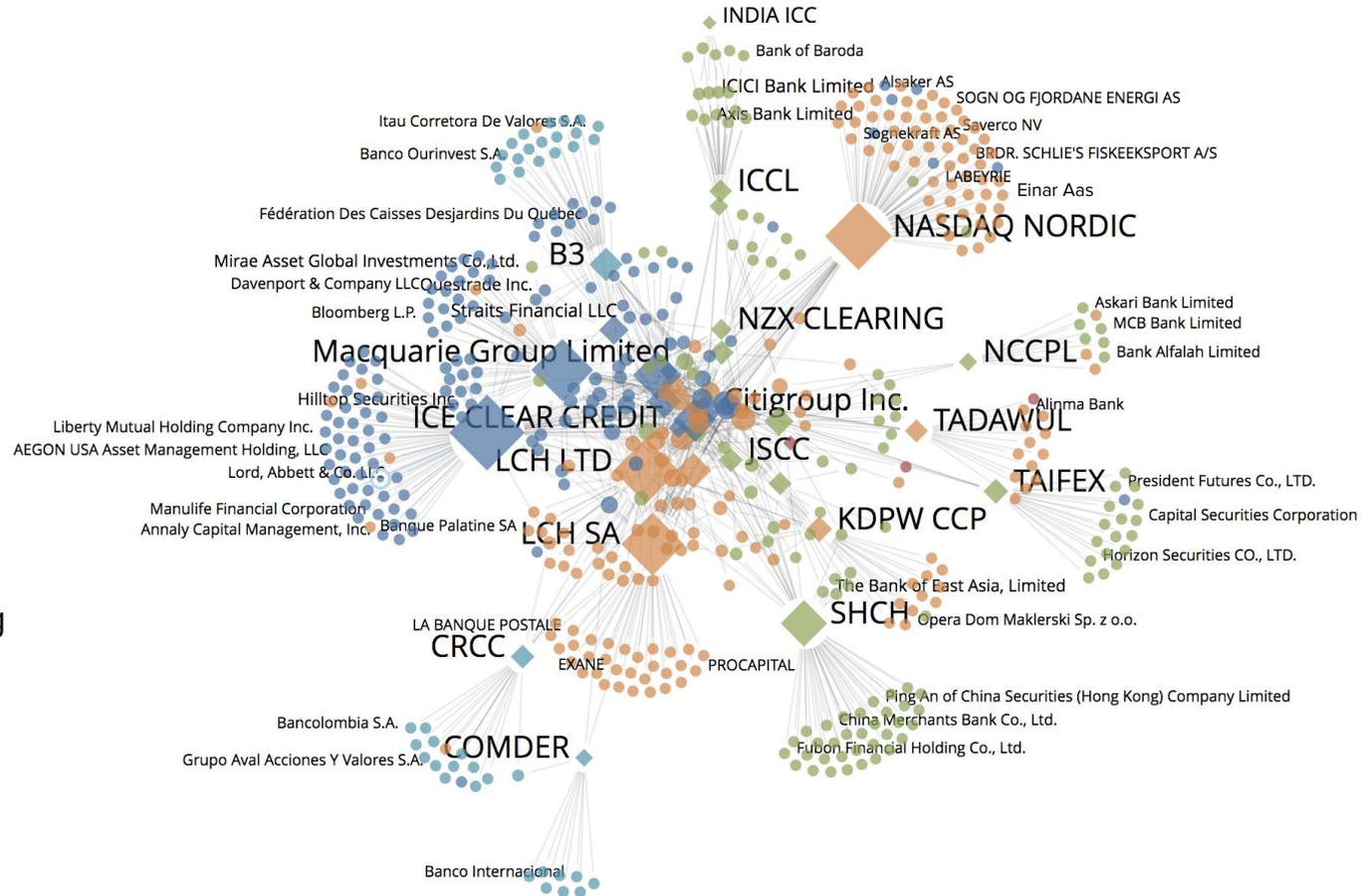
FNA (2018)

# CCP Interconnectedness on Parent Level

We see CCPs (diamonds) and their members (circles) from different regions:

- North America (blue)
- Europe and Middle East (orange)
- Asia and Pacific (green)
- Latin America (light blue)
- Africa (red)

On parent level we see a completely connected network dominated by a core consisting of CCPs from North America and Europe and global banks.

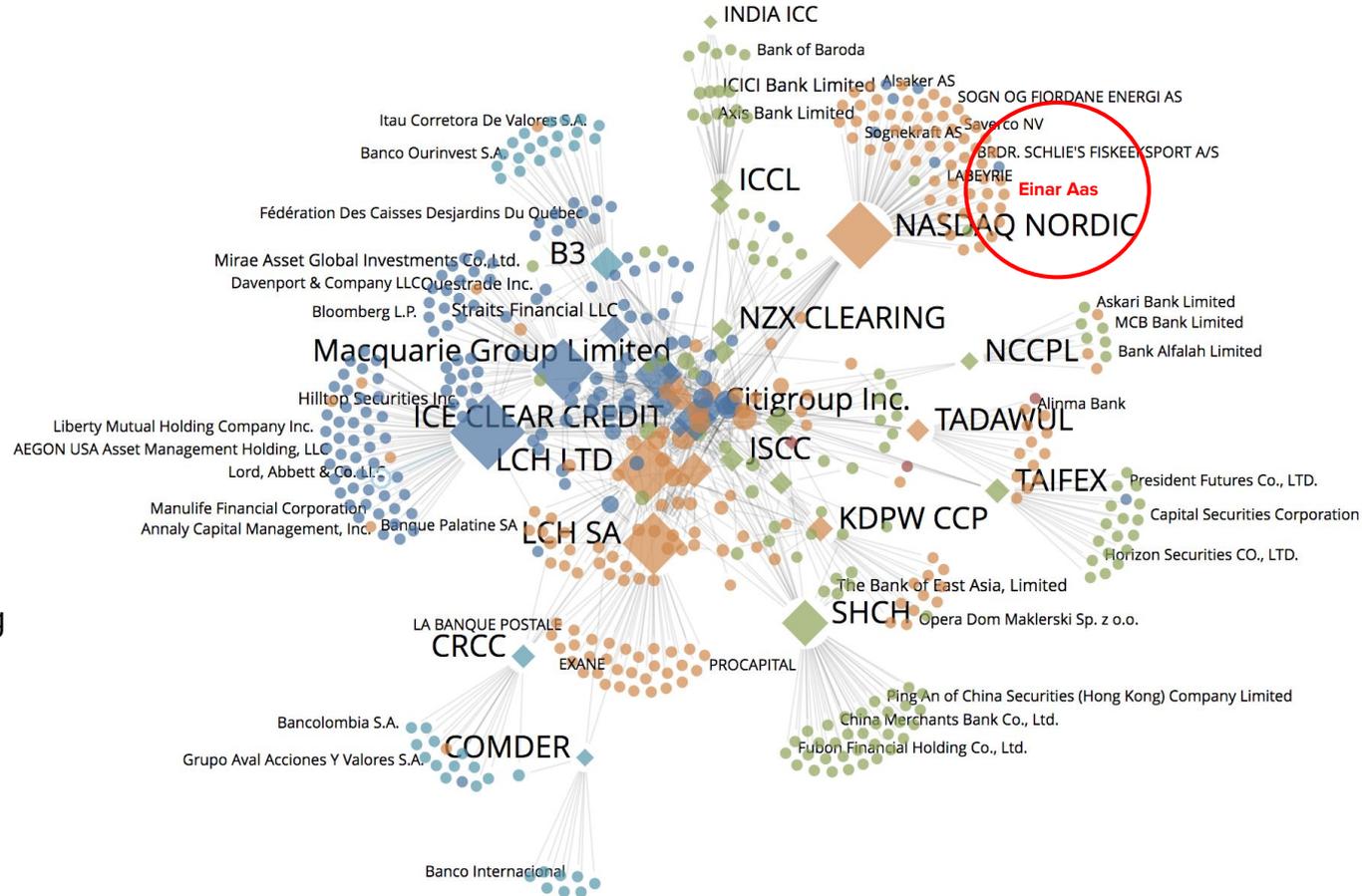


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# Illustration: Operational Failure Simulations within a CCP

## Simulating Operational Failure of a Settlement Member

### Mapping

This network shows settlement relationships between the:

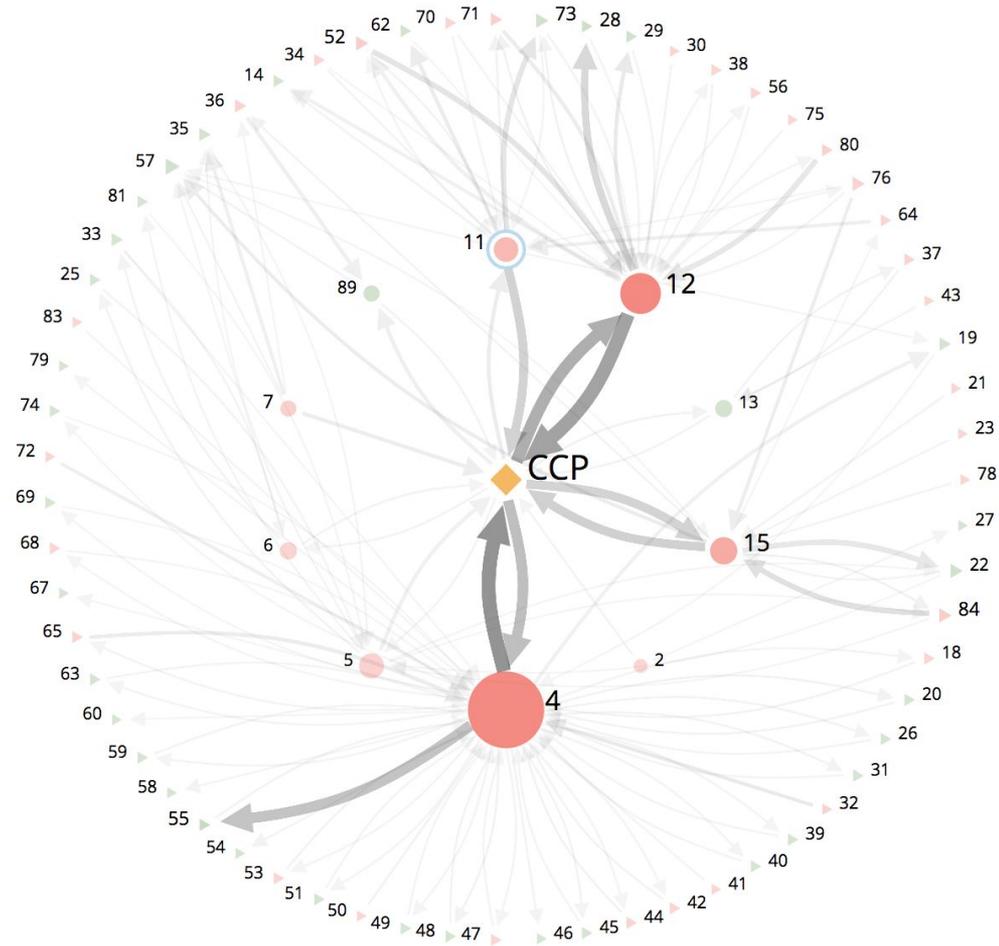
- CCP (center)
- Settlement members (inner circle) and
- Clearing members (outer circle)

Size of node shows value of multilateral position

Width of lines shows value of bilateral positions

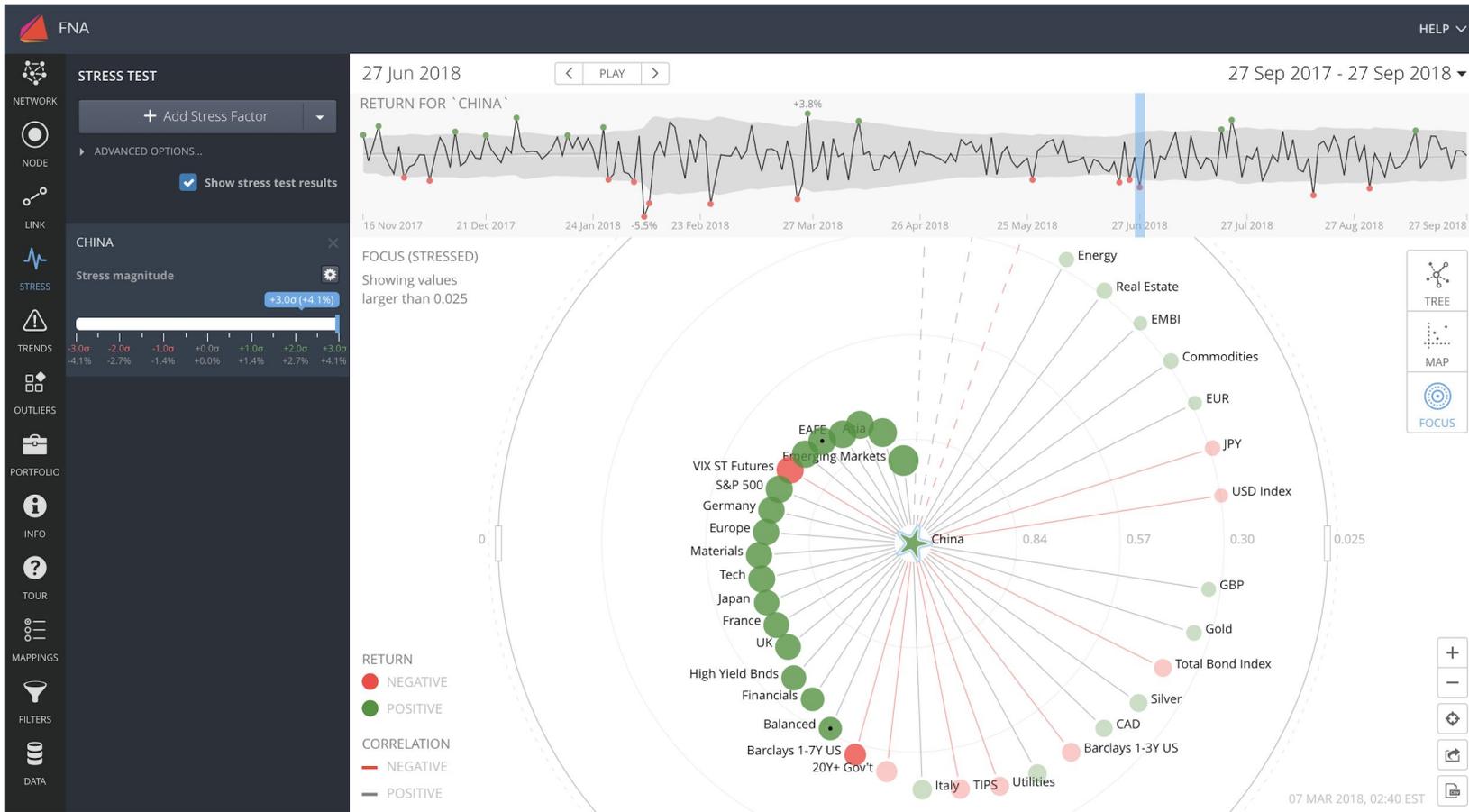
### Question

What would happen if member 4 had an operational failure?





# Illustration: Shifting Correlation Networks



# Analytics are leveraging improved data sets

Better internal bank risk data (BCBS239) > enhanced regulatory reporting

CCAR / SST

Resolution & recovery plans

Payments data repositories

Derivatives TRs / SFTRs

CCP stress tests

Trade & communications surveillance data



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