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Interdependent networks in Economics and Finance—A Physics approach

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Highlights:

- By understanding the underlying mechanism of systemic failure, we can investigate and devise immunization and mitigation strategies.
- Fragility and resilience in interdependent networks show markedly different behavior than single networks.
- Understanding behavior of interdependent complex networks allows for more precise monitoring of system evolution (such as concentration of risk in subsets of the networks) and selection of optimal repair in case of failure.
- Economic importance, as it emerges from interdependent network analysis, provides counterintuitive results as to the key players in global economy.

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