

Economics
Webinar
Series
2021



SOUTH ASIAN UNIVERSITY
FACULTY OF ECONOMICS

Webinar

Ripples on Financial Networks

Anindya S. Chakrabarti
IIM Ahmedabad

Date: March 19, 2021
(Friday), 2.30 pm

Meet id: meet.google.com/vnw-jkxz-ftq

All are Welcome

ABSTRACT

In the financial markets, asset returns exhibit collective dynamics masking individual impacts on the rest of the market. Hence, it is still an open problem to identify how shocks originating from one particular asset create spillover effects across other assets. The problem is more acute when there is a large number of simultaneously traded assets, making the identification of which asset affects which other assets even more difficult. In this paper, we construct a network of the conditional volatility series estimated from asset returns and estimate a many-dimensional VAR model with unique identification criteria based on the network topology. Because of the interlinkages across stocks, volatility shock to a particular asset propagates through the network creating a ripple effect. Our method allows us to find the exact path the ripple effect follows on the whole network of assets.