PHY525
Project Proposal

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What are we doing?

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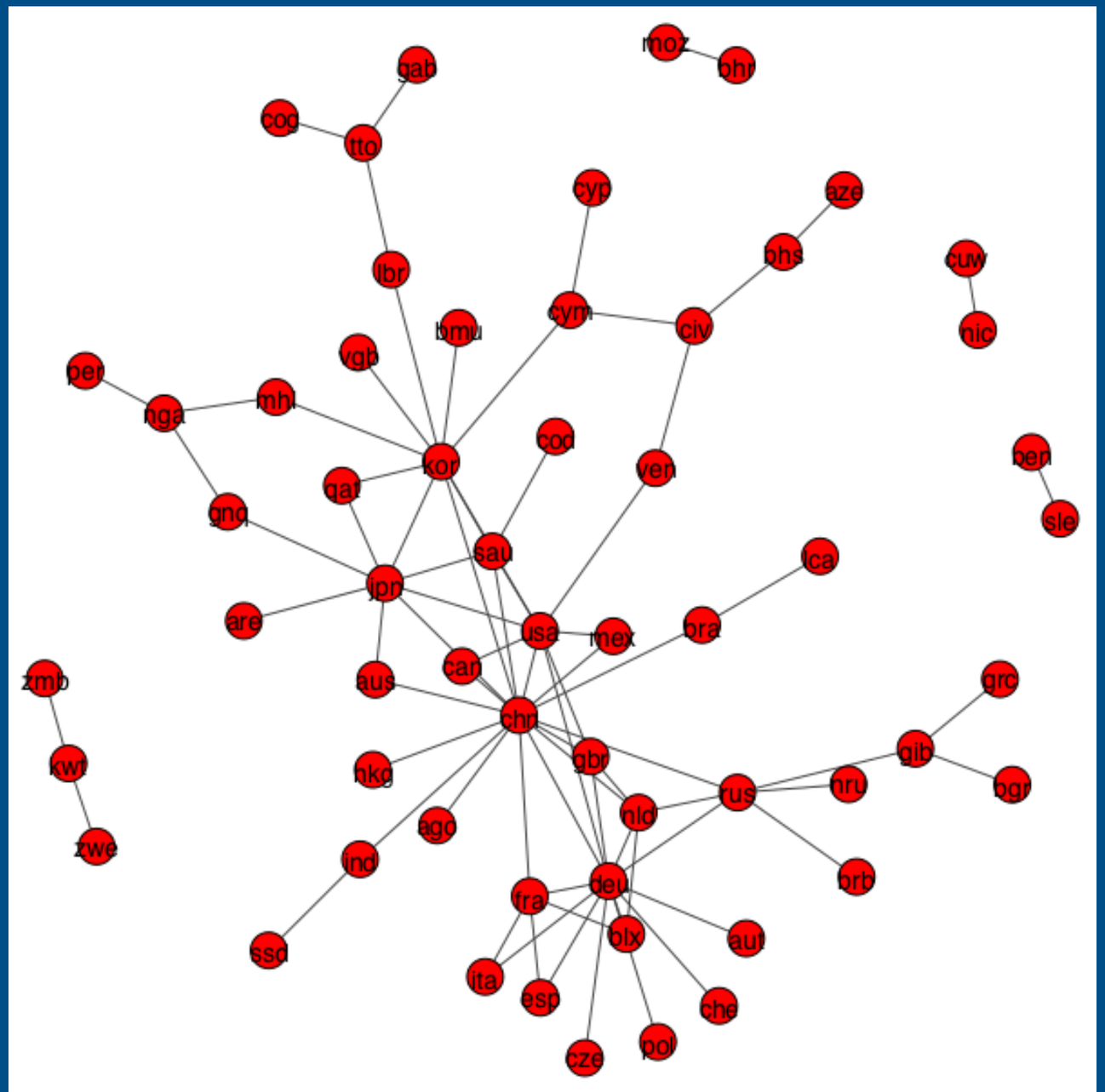
Trade Network

- Trade Network generated from time-series data on import/export among all countries obtained from databases

	year	origin	dest	hs07	export_val	import_val
0	2008	ago	civ	902	0.00	3053887.0
1	2008	ago	civ	1511	0.00	31017.0
2	2008	ago	civ	1704	0.00	56428.0
3	2008	ago	civ	2710	932121.72	0.0
4	2008	ago	civ	2711	492622.69	0.0

Network (Sample)



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Why are we doing it?

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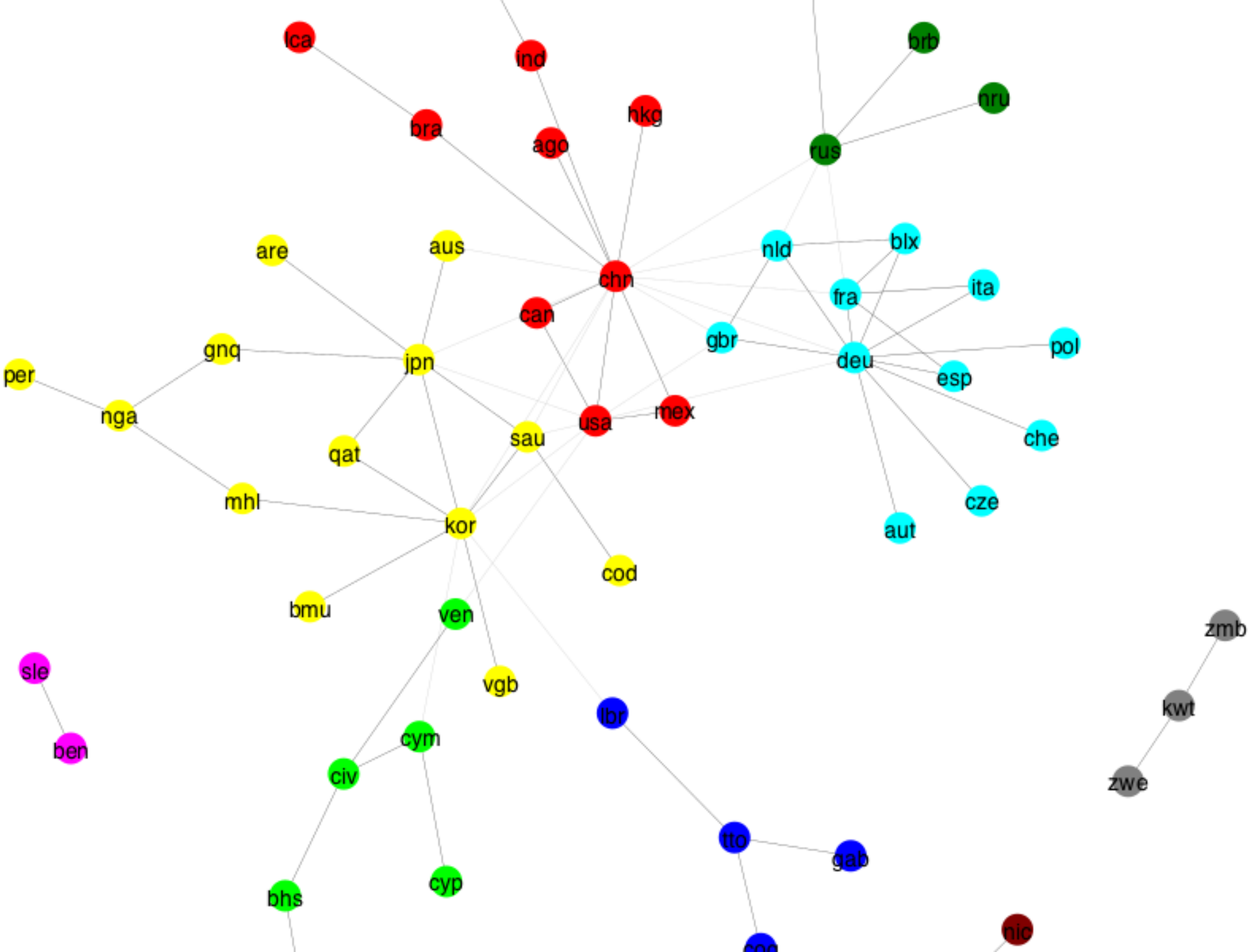
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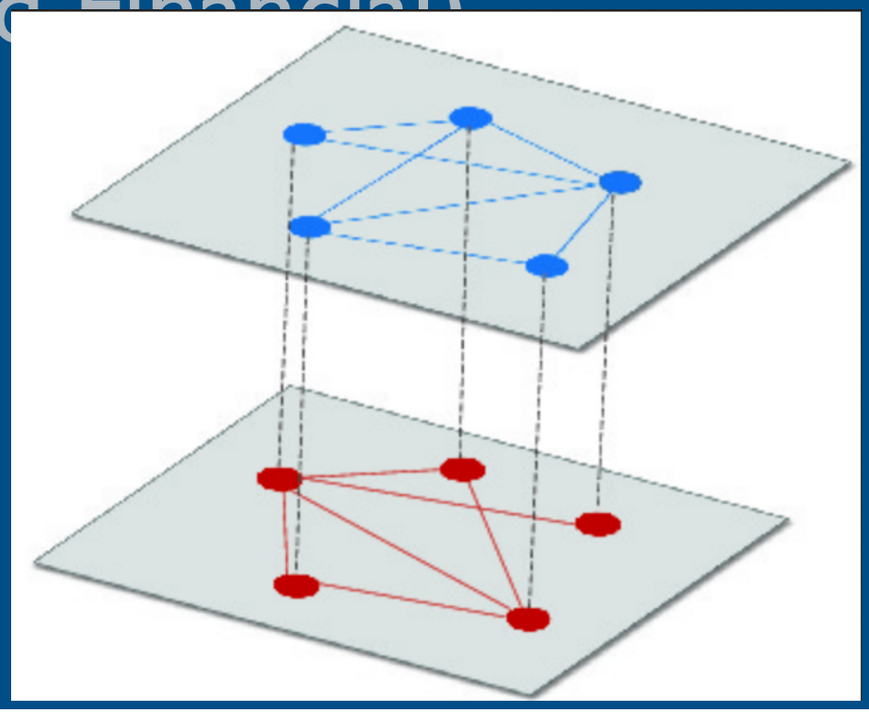
Plans to do it

- Techniques learned from class
- Weighted Centrality Measures (net import/export, etc…)
- Correlations and Patterns
- Correlations among countries given the trading scales
- Community structures based on different trade agreements (APEC, EU, NAFTA, etc…)

Multiplex Extension

- Individual goods (meat, etc…)
  - Comparison w/ transportation network
- Potential connection with Financial Network
- Correlation between nodes in separate "flat" networks (Trade and Financial)