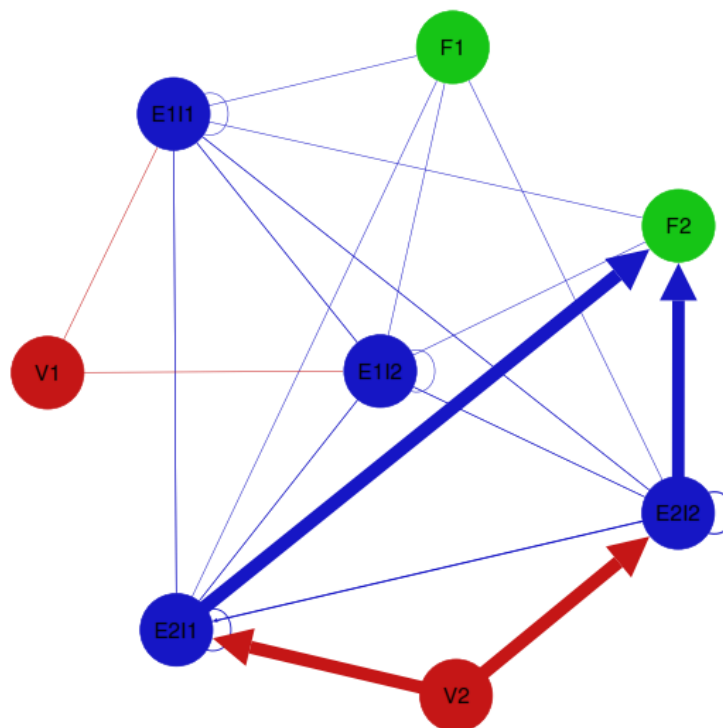


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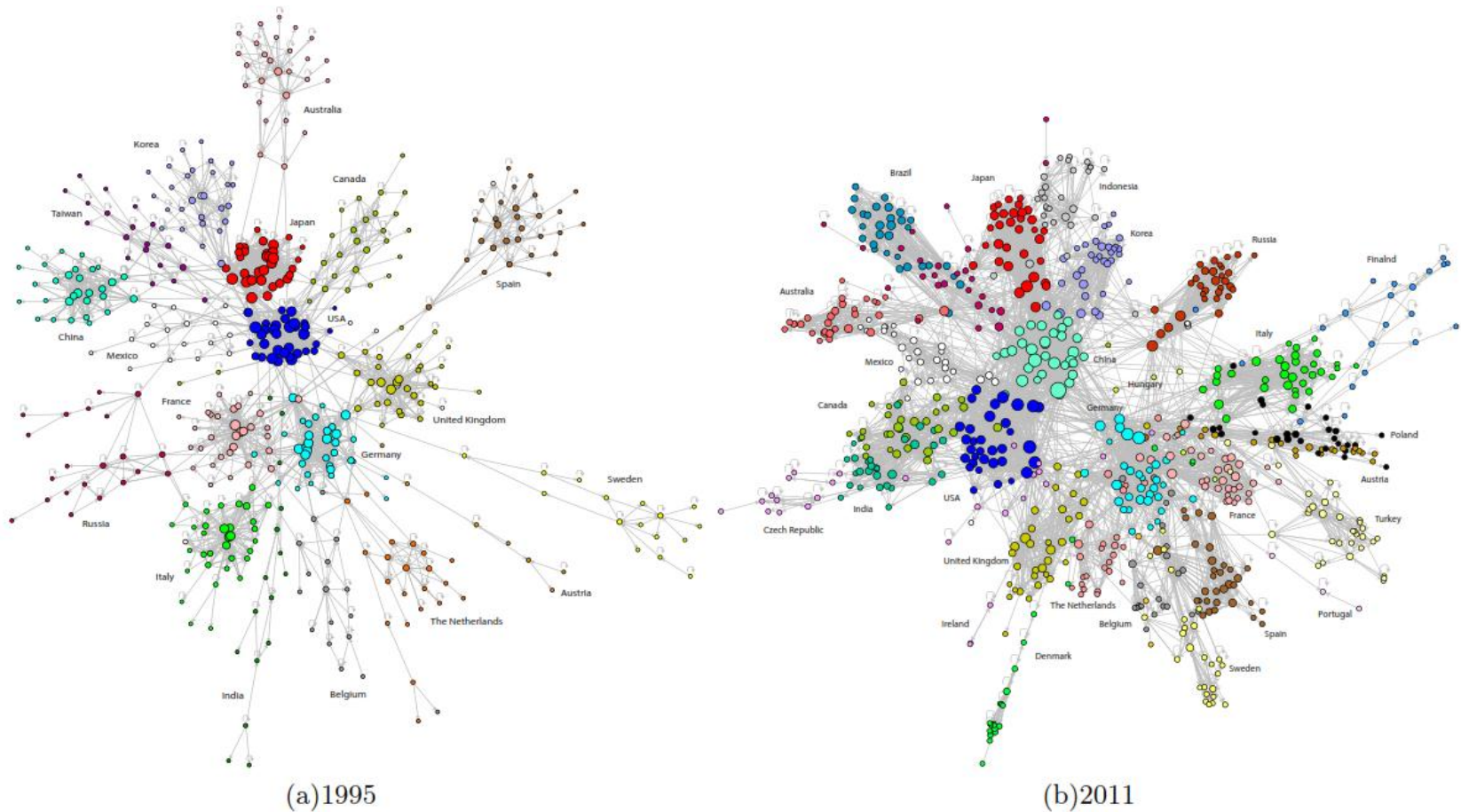
Thammasat University

Seller Industry		Buyer Industry				Final Demand		Total Output
		Economy 1		Economy 2		Economy 1	Economy 2	
		Industry 1	Industry 2	Industry 1	Industry 2			
Economy 1	Industry 1	5	10	20	10	45	10	100
	Industry 2	10	5	10	20	50	5	100
Economy 2	Industry 1	30	15	800	500	5	8650	10000
	Industry 2	35	30	1000	1000	25	7910	10000
Value Added		20	40	8170	8470			
Total Output		100	100	10000	10000			



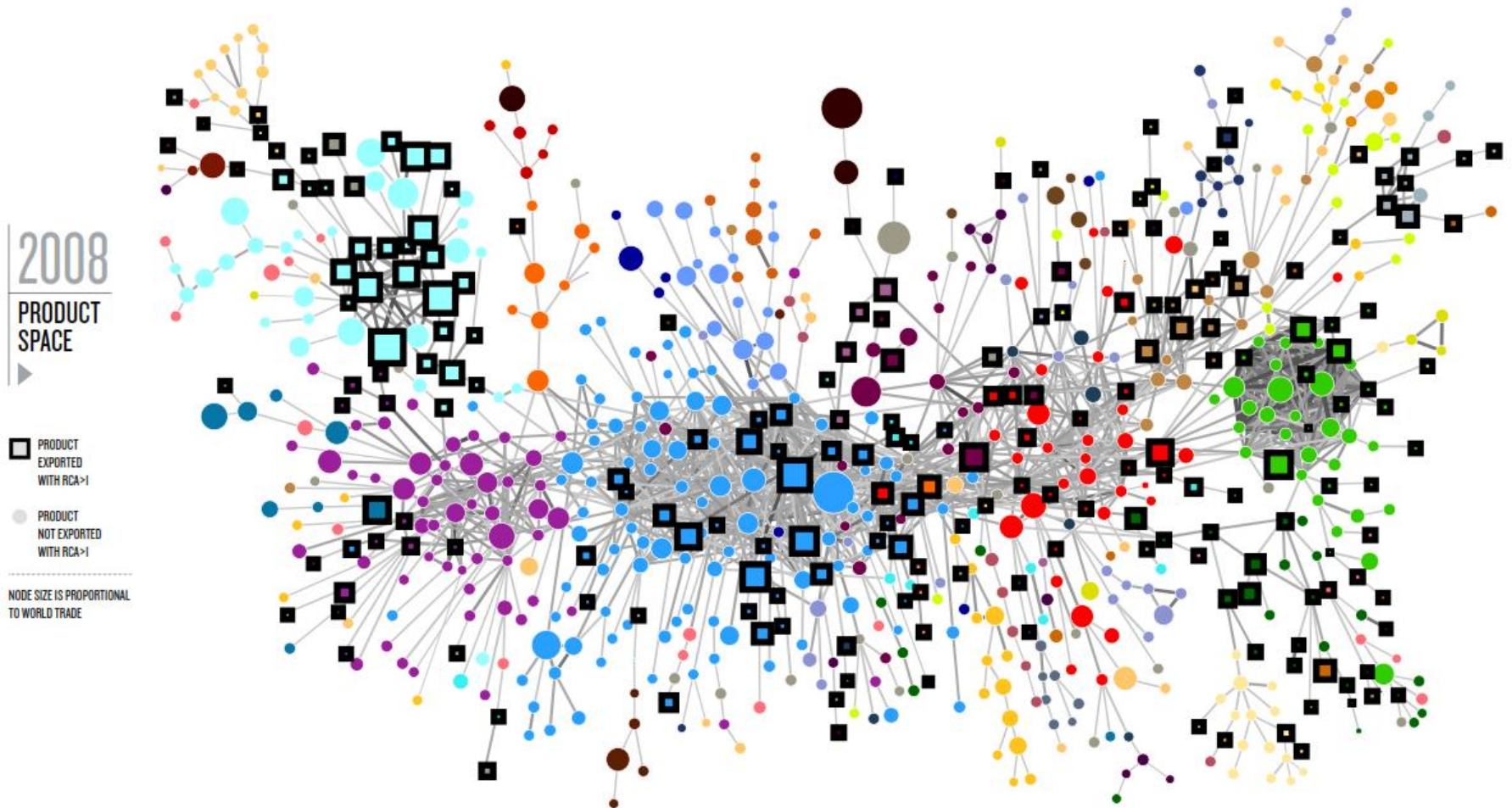
Source: Cerina et al.(2014)

Result of Applying the Network Analysis to Global IO Tables



Source: Cerina et al.(2014)

Atlas of Economic Complexity Index



Source: Hidalgo et al.(2013)

- The **global footprint matrix** is the **input data** for the network analysis.
- The **degree of centrality** of each sector to the network of global footprint was computed by using **PageRank technique** introduced by Larry Page, the co-founder of Google (Brin and Page (1998)).
- The network graphs were generated by using ForceAtlas2 method based on Jacomy et al. (2014).
- The **size of each node** represents its **PageRank** value, indicating **its significance to the network**.

Main findings obtained from Network Analysis

- The results obtained from Network Analysis indicate that **agriculture** was the **central activity** utilizing **water and land**.
- Also the **agriculture** was the **key gateway** connecting local sectors to the international production chain.
- In the case of CO2 emission, the **electricity generation and natural gas production** was the key local sector **forwarding the embodied CO2 emission** to major exporting sectors such as the petrochemical industry and the non-metal material production.
- These outcomes of network and centrality analyses **prioritized the sectors** that should be targeted in order to **improve the national efficiency** of natural resource utilization.