Sustainable development and corporate global strategy: from vertical to horizontal efficiency of production systems

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Mainstream theoretical frameworks on corporate global strategy (e.g. Contractor et al, 2010) predict a tendency of value chains (VC) to indefinitely disintegrate and disperse along both the organizational and geographical dimension.

This paper however remarks that elements related to sustainability (waste minimization, product recovery, etc.) are pushing business activities one towards the others, therefore increasing the level of geographical proximity among VCs.

In an age in which organizational exchanges are the rule, VCs dispersion is not determined just by how much previously vertically-integrated production processes are disintegrated: instead, their concentration is determined by the degree at which business process once belonging to different VCs are getting in touch with one another.

Shifting the unit of analysis from individual firms (or VCs) to aggregates, the actual level of value chains dispersion can be captured.
Theoretical frameworks on sourcing

(Contractor et al., 2010)

(Kedia and Mukherjee, 2009)
Value chain dispersion

- Re-cycling
- Transportation costs
- Local investments
- Circular economies
- Reverse logistics

- Market complexity
- Technological sophistication
- Focus on core-areas
- Knowledge codification
Circular economies: Guitang Group

[Diagram showing the circular economy process involving sugarcane, sugar, alcohol, cement, and paper production.]
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Efficiency from vertical integration

Geographical and organizational concentration of activities among isolated value chains
Geographical and organizational dispersion of activities among separated value chains
HORIZONTAL EFFICIENCY

Geographical concentration and organizational dispersion of activities among connected value chains
In an age in which organizational exchanges are the rule, if the unit of analysis stays at the level of single firms or VCs, the actual level of value chains dispersion is not captured.

Value chains dispersion is not determined just by how much previously vertically-integrated production processes are disintegrated.
By shifting the unit of analysis to aggregates of VCs, it is possible to capture their level of aggregation.

VCs concentration is determined by the increased number of linkages with which business process once belonging to different VCs are getting in touch with one another.