

Table 1: Key constructs and variables, and assessment

Constructs	Variable 1	Variable 2	Variable 3	Overall assessment
A. Commitment of lead companies	Physical investment	Investment in human capital (training, education, etc.)	Contribution to local strategic planning	High: 1+2+3 Medium: 1+2 Low: 1 None: 0
B. Innovation Collaborations	Internal R&D in lead companies and SME suppliers	Active RIS and relevant projects with 1 st , 2 nd , 3 rd , and 4 th tier suppliers	Interaction and joint projects between RIS, CID, lead firms and their GIN	High: 1+2+3 Medium: 1+2 Low: 1 None: 0
Risk of Fracture	A1+B1	A2+B2	A3+B3	Max: 0 High: 1 Medium: 1+2 Low: 1+2+3

Source: own elaboration.

Table 2: Selected cluster case studies in the UK, Italy, Spain and Costa Rica

	Upholstery, Forli, Italy	Wind energy Bilbao, Spain	Furniture, Azpeitia, Spain	Electronics & Software, S. Jose, Costa Rica
Size & Growth	100+ firms; 5,000 employees; €169 million export	100+ firms and 16,000 workers; 7.3 billion turnover and increasing	200 firms & 5,500 employees; €1.2 billion turnover & increasing	900 firms; \$3 billion of export in 2016 and increasing
Lead company	Large local firm (Poltrone&Sofa)	Large local firms (Iberdrola & Gamesa)	Medium-sized firms (FMG-MCG)	Large foreign firm (Intel)
Internationalization	Export	Export + FDI	Export	Export
Innovation	Incremental	Radical and incremental	Radical and incremental	Radical and incremental
Type of Industry	Traditional industry	Intermediate technology industry	Traditional industry	High technology industry
Potential for an internal fracture	Risky position	Risky position	Current success	Current success
Main sources of information	Intesa San Paolo, 2017; Dametto, 2016; Authors, 2009	Cluster Energia webpage 2018; Authors, 2013	Cluster Habic webpage 2018; Authors, 2014; Authors, 2010	Camtic webpage, 2018; Alfaro, 2013; Ciravegna, 2011; Authors, 2008

Source: own elaboration.

Table 3: Lead firms' commitment

CID	Lead Firm	Internationalization	Commitment	Growth
Upholstery Forli, Italy, Upholstery	Poltrone&Sofa	Only Export	Low	Unsteady Growth
Bilbao, Spain, Wind Energy	Iberdrola & Gamesa	Export and overseas production	Medium	Unsteady Growth
Azpeitia/Azkoitia, Spain, Furniture	FMG/MCG	Only Export	High	Sustained Growth
San Jose, Costa Rica, Electrons. & Software	Intel	Export and overseas production	High	Sustained Growth

Source: own elaboration.

Table 4: Local lead firms, local SMEs, RIS and GIN

	Type of industry	Internal R&D	Collaborations RIS with CID	Interaction RIS&CID with lead firms & GIN	Overall assessment & performance
Forli, Italy, Upholstery	Traditional	Low	Low	Low	Low
Bilbao, Spain, Wind Energy	Intermediate technology	High (lead and 1 st tier suppliers)	High (1 st tier suppliers only)	Medium	Medium
Azpeitia, Spain Furniture	Traditional	Medium	High	High (MCG)	High
San Jose, Costa Rica, Software & Electronics	High technology	High (lead and 1 st tier suppliers)	High	High	High

Source: own elaboration. Note for Overall Assessment: High=3; Medium=2; Low=1 (see Table 1).

Table 5: Synthetic results

	Commitment	Innovation collaborations (RIS/CID-lead firm/GIN)	Type of industry	Success of the CID
Forli, Italy, Upholstery	Low	Low	Traditional	Unsteady
Bilbao, Spain, Wind Energy	Medium	Medium	Intermediate Technology	Unsteady
Azpeitia, Spain Furniture	High	High	Traditional	Steady
San Jose, Costa Rica, IT & Electronics	High	High	High Technology	Steady

Source: own elaboration.