The relationship between capability building and the evolution of GINs

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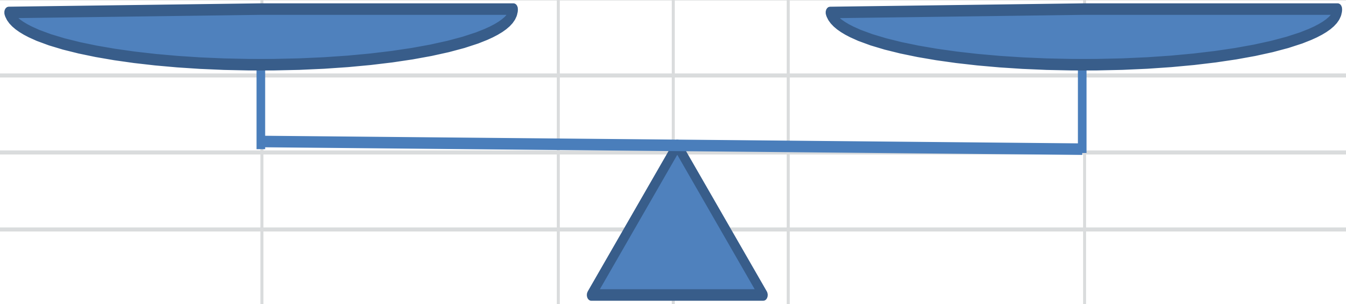
Generalised macro-determinants

- LARGE populations, growing markets
- Pool of capabilities
  high level skills/engineers
- Large corporate R&D centres
- GINs more likely to emerge
- **India and China**

- Medium populations, smaller markets, regional gateways
- 'Pockets' of specialised capabilities
- Fewer, smaller R&D units focused on adaptation
- GIn/Gin more likely
- **Brazil and South Africa**

Human Capabilities in the context of GIN determinants

	Favour GIN formation		*Don't favour GIN formation*	
	Home country	Host country	Home country	Host country
Human capital availability				
Markets				
Sectoral factors				
Geography				
Culture and tacit knowledge				
Infrastructure				
Policy				
Management				



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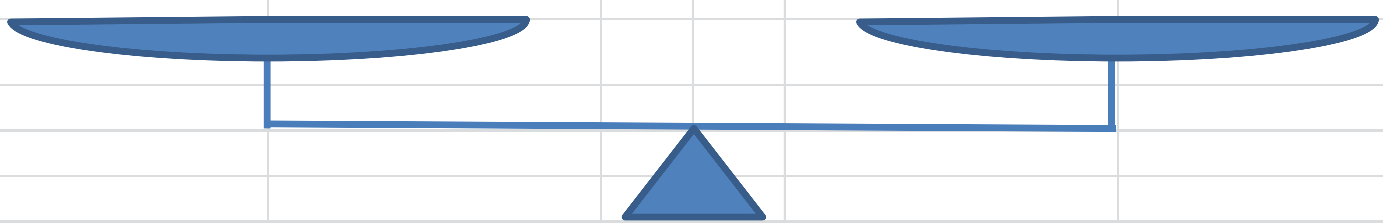
	Favour GIN formation		*Don't favour GIN formation*	
	Home country (SA)	**Host country (UK)**	**Home country (SA)**	**Host country (UK)**
Human capital availability	Skills shortages	Specialised skills availability	Lower cost of skills	Expensive skills
Markets	Small market	Large market		
Sectoral factors	Follow-source and follow design lock domestic firms out of the automotive value chain	Specialised knowledge assets provide access to the value chain		
Geography	No proximity to customers (who are based in Europe)	Proximity to customers		
Culture and tacit knowledge		No linguistic barriers (English-speaking); cultural barriers are minor		
Infrastructure				
Policy				
Management	Management strategy of seeking knowledge assets and access to customers on a global front			



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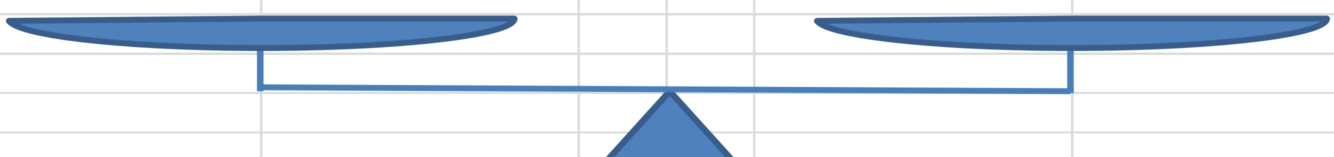
	Favour GIN formation		*Don't favour GIN formation*	
	Home country (Dk)	**Host country (SA)**	**Home country (Dk)**	**Host country (SA)**
Human capital availability	Some skills gaps; High cost	Acquisition of specialised knowledge; Acquisition of valuable network assets	Large and competent skills pool	Limited availability of specialised skills
Markets	Limited market size; stagnant growth.	High local demand for product adaptation and new product development. Growth market.		Limited market size
Sectoral factors		Agro-food sector is characterised by the need to adapt to local input and market conditions		
Geography		Regional gateway to Africa; Commonalities with other emerging markets (e.g. Brazil)		No geographical proximity
Culture and tacit knowledge		Acquisition of valuable tacit knowledge. Only minor cultural and linguistic barriers.		
Infrastructure				
Policy		Strong IPR protection		
Management	Partially decentralised global internalised knowledge network. SA grouped with Brazil.			



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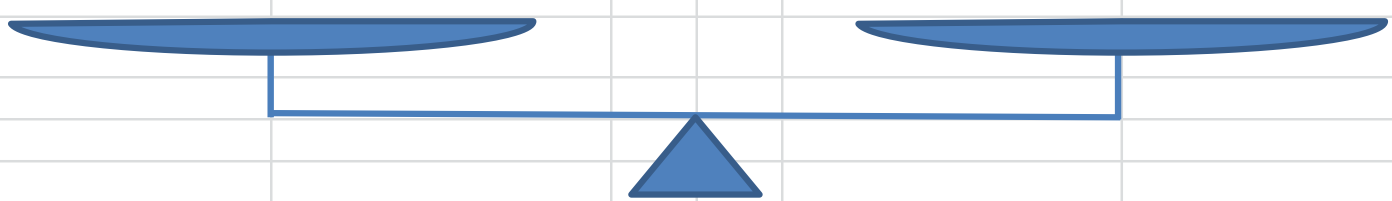
	Favour GIN formation		Don't favour GIN formation	
	Home country (US/Swd)	Host country (China)	Home country (US/Swd)	Host country (China)
Human capital availability	Limited size of skills pool; Gaps in specific skills sets; High cost.	Large pool of human capital with the required competences and capabilities - at lower cost		Occasional problems with skills quality. Skills cost is escalating due to increased demand - approaching EU levels in major cities.
Markets	Stagnant growth	Very large market with massive growth potential; Demand for local product adaptation and development of products for local market.		
Sectoral factors				In ICT software sector the importance of geographical proximity and tacit knowledge are reduced.
Geography				
Culture and tacit knowledge				Some difficulties with cultural and linguistic gaps
Infrastructure				
Policy		Policy requires R&D investment as a		Poor IPR regime
Management		Globalised and decentralised innovation management structures		



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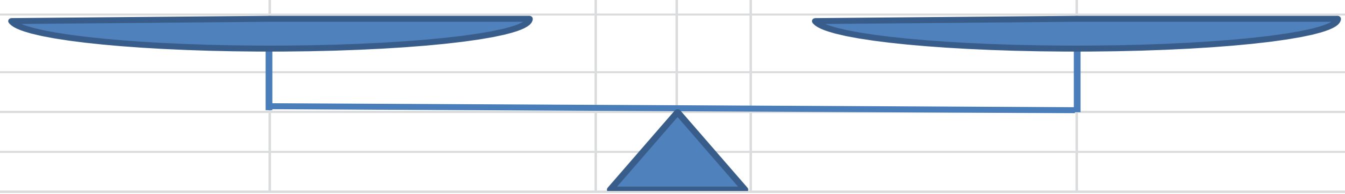
	Favour GIN formation		Don't favour GIN formation	
	Home country (Ger)	**Host country (Ind)**	**Home country (Ger)**	**Host country (Ind)**
Human capital availability	High cost	Sufficient scale of skills - at a lower cost	General availability of the required skills, both in terms of scope and scale	Skills quality not always sufficient. Lack of trust in domestic educational institutions
Markets	Stagnation in domestic market; Risk in EU market	Large market with significant growth potential; High demand for local adaptation	Domestic and EU still account for largest markets	
Sectoral factors			Strategic incentive to retain core R&D in home country to minise risk and retain control	Automotive sector places emphasis on tacit knowledge, which increases the challenge
Geography		Long logistical pipeline creates demand for some process innovation to improve quality levels		
Culture and tacit knowledge	Management programme for crossing cultural barriers		Difficulty in crossing deep cultural barriers. Necessary to expend considerable resources to do so	
Infrastructure				Poor physical infrastucture
Policy				Erratic policy and political environment
Management			Strategic incentive to retain core R&D at home	



Capabilities on the move

- Knowledge and technology transfer, ‘brain’ circulation, inter-cultural communication, global learning and capability building an opportunity

Thanks for your attention/questions

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