

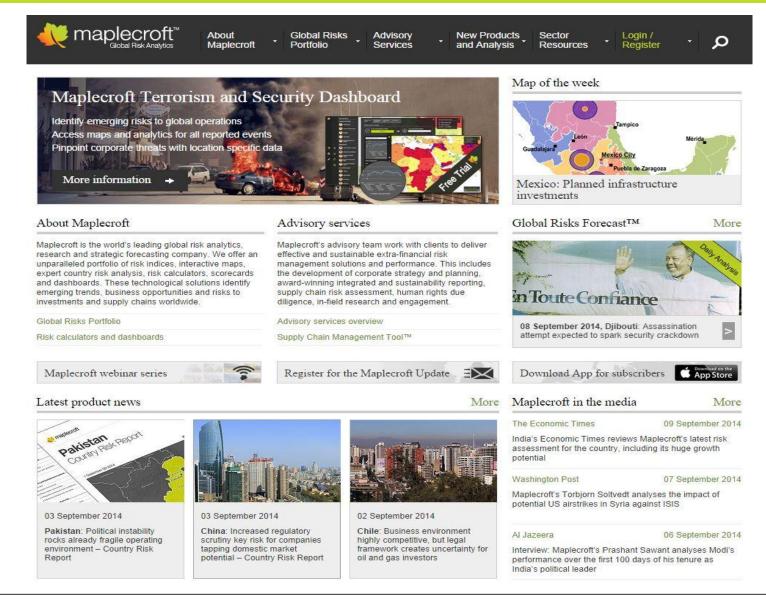
Responsible Sourcing & Growth Models: An empirical investigation across countries

Dr. Mariana Magaldi de Sousa (Principal Analyst)

September 2014



Maplecroft

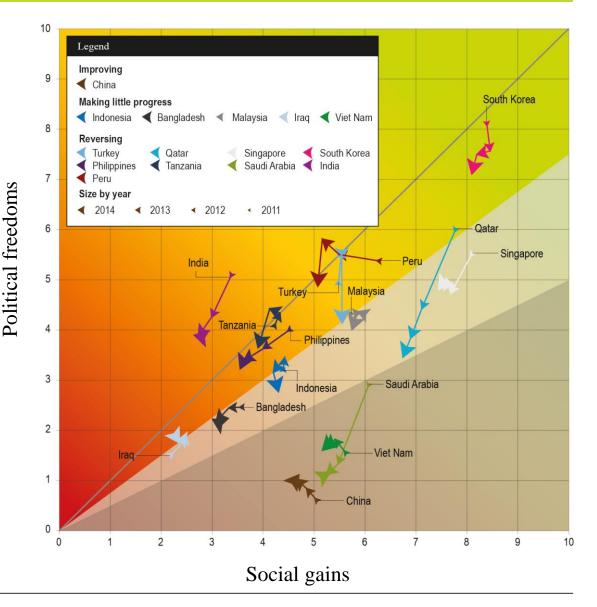


Sustainability & ESG risks

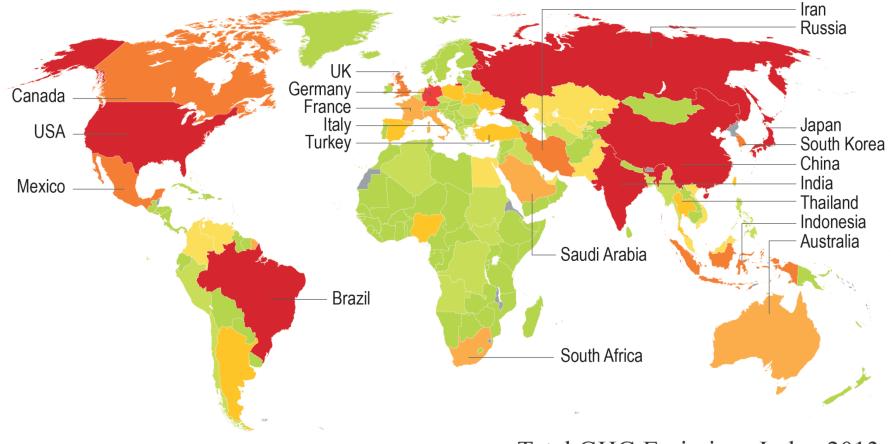
Political	Economic	Social	Environment				
Dynamic Risk	Legal and Regulatory	Human Rights Risk	Climate Change and				
Governance Framework	Environment	Complicity and Rule of Law	Environment				
Regime Stability	Rule of Law	Human Security	Climate Change Vulnerability Emissions and Energy Use				
Political Violence	Judicial Independence	Labour Rights and Protection					
Terrorism	Corruption Risk	Civil and Political Rights	Sustainable Energy				
Business and Macroeconomic Risk	Corporate Governance	Access to Remedy	Ecosystems Services				
Expropriation & Resource Nationalism	Regulatory Framework	OTHER	Water Security				
Societal Forced Regime Change	Respect for Property Rights	Poverty and Human Development	Environmental Regulatory Framework				
Structural Risk	Growth Environment	Food Security	Natural Hazards Risk				
Complicity with Oppressive Regimes	Growth Performance	Digital Inclusion	Natural Hazard Economic Exposure				
Democratic Governance	Investment and FDI	Education	Socio-economic Resilience				
Supply Chain Complicity Risk	Trade and Capital Flow Openness	Capacity to Contain Infection	Hydro-meteorological Risks				
Societal Resilience	Macroeconomic Stability	Influenza Pandemic Risk	Tropical Storm and Cyclone Risk				
Economic Diversification	Working-Age Population	HIV/AIDS, Malaria and TB	Geophysical Risks				
Resource Security	Middle-Class Growth	Health and Safety	Seismic Risk				
Infrastructure Readiness	Human Capital	Transport and Communications	Tsunami Risk				

Why is sustainable growth important for (Emerging Markets) FDI?

- Economic growth is sustainable when "it meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations World Commission on Environment and Development, 1987)
- To businesses: sustainability refers to "an organization's activities that demonstrate the inclusion of <u>social</u>, <u>environmental</u>, and <u>corporate</u> <u>responsibility</u> concerns in business operations and interactions with stakeholders" (van Marrewijk & Verre, 2003)
- In practice, businesses have to mitigate risks:
 - Environmental risks
 - Social risks
 - Governance risks



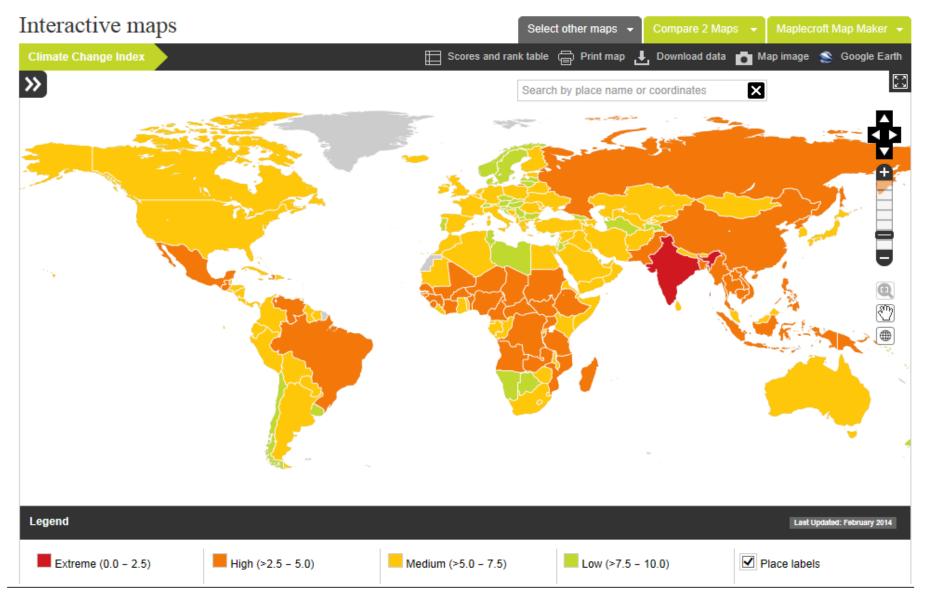
GHG: Emerging economies becoming the big emitters



Total GHG Emissions Index 2013 © Maplecroft 2012

Legend	Extreme Risk	High Risk	Medium Risk	Low Risk				
	■ 0.00 - 1.25 ■ >1.25 - 2.50	>2.50-3.75 >3.75-5.00	>5.00-6.25 >6.25-7.50	>7.50-8.75 >8.75-10.00				

Climate change index



© Maplecroft 2014 | 1 Henry Street, Bath, BA1 1JS, United Kingdom | t: +44 (0) 1225 420 000 | e: info@maplecroft.com | w: maplecroft.com

Structurally-bounded growth models across countries

- Economic growth is bounded by a country's productive, consumption, and investment structures. Yet, there is no systematic mapping of countries' different economic structure configurations or studies about the relationship between these configurations and sustainable growth
- The structurally-bounded growth models (Magaldi & Maldonado, 2014; Maplecroft's Growth Opportunity Atlas, 2015):
 - Productive Structure
 - Consumption Structure
 - Investment Structure
- What is the geographical distribution of these growth models?
- Is there an empirical relationship between FDI-based growth models and sustainability performance?
- A new typology of growth models combined with the sustainability performance indicators allows us to answer these questions

PRODUCTIVE STRUCTURE

Based mainly on: Agriculture Public Administration & Social Security Financial & Real Estate Manufacturing Mining Trade & Tourism

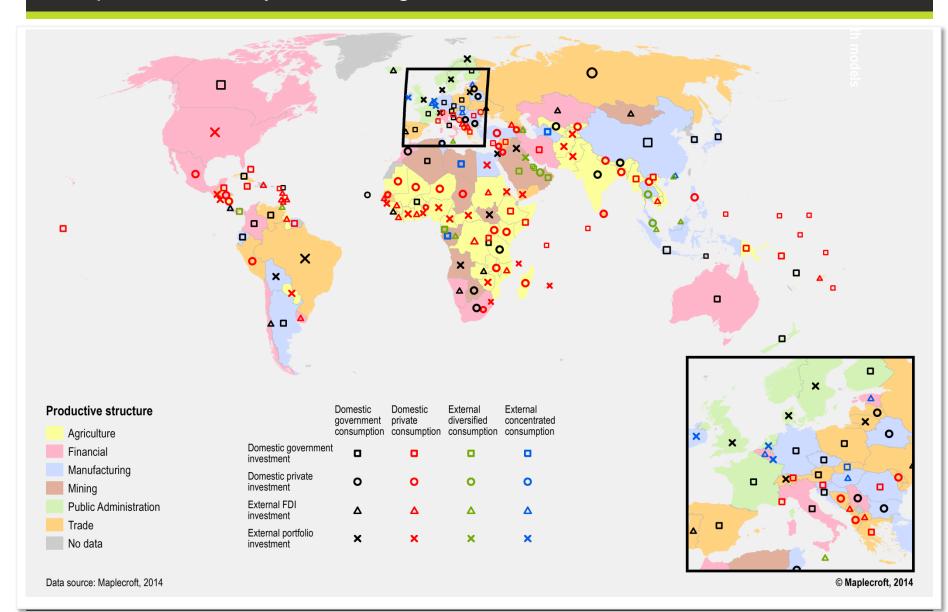
CONSUMPTION STRUCTURE

Based mainly on: Domestic government Domestic private sector External concentrated markets External diversified markets

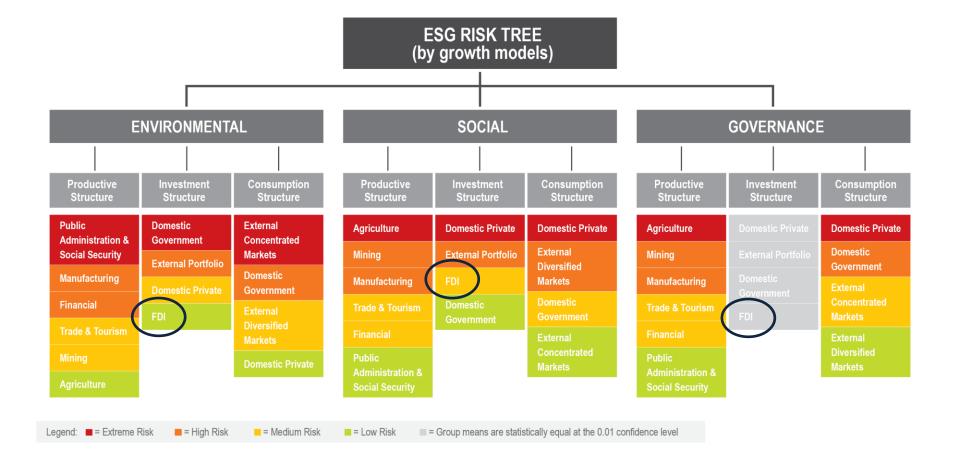
INVESTMENT STRUCTURE

Based mainly on: Domestic government Domestic private sector Foreign direct investment External portfolio investment

A map of structurally-bounded growth models



ESG risks vs. growth models



Maplecroft's Supply Chain Management Tool

Supply Chain Management Tool

Maplecroft works with some of the world's leading organisations to structure and inform approaches to responsible and strategic sourcing. We advise on all stages of the process for all sectors. This includes risk assessment and due-diligence for existing and new suppliers, geographic and commodity analysis / horizon scanning for directs and indirects, as well as managing and monitoring risk and resilience across the supply chain.



VIEW RISK SCORECARD FOR INDIVIDUAL SUPPLIER



Q

Four pillars of responsible sourcing:

Responsible labour practices	The responsibility of a company to adhere to national and international labour standards, and promote best practice throughout their supply chain
Social responsibility	The responsibility of a company to positively impact societies. This includes ensuring respect for and the promotion of human rights
Environmental responsibility	The responsibility of a company to mitigate against environment harm and maximise sustainability
Ethical business practices	The responsibility of a company, its employees and business partners to be accountable for their impact throughout the supply chain, recognising the values of transparency and integrity

Businesses are increasingly incorporating these four pillars in to their responsible sourcing strategy in order to protect supply chain and business continuity. This demonstrates a move from a 'compliance' approach to a 'beyond-compliance' approach.

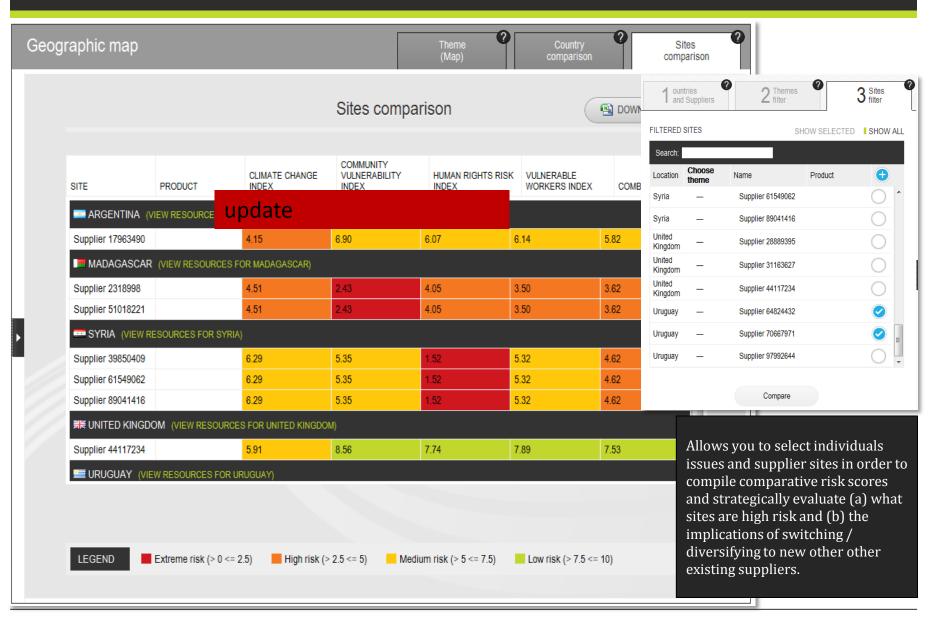
Supplier self-assessment questionnaires

About Global Risks Professiona Maplecroft Portfolio Services	II -		nancial Sector rvices risk											
			1. Best practice and cert	tification										
Human Rights			1.1 Own set of business princ	iples relating to corporate re	esponsi	bility								
Written policy (element) or guidance on human rights		Evidence includes documentation of principles or standards based on core values, with reference to laws, rules or ethical principles that govern company operations in relation to corporate responsibility. [IDENTICAL QUESTION CII 1.1 and MSPB 1.1 - ENSURE CONSISTENT RESPONSE]												
			No evidence											
O None			None							(0.00)				
In development Yes, requires compliance with national law and international best practice			In development	 In development 						(25.00)				
 Yes, requires compliance with national law and international best practice Yes, requires monitoring and reporting of performance 			Internally held	Internally held						(50.00)				
 Yes, requires targets and continuous improvement 			Publicly disclosed						(100.00)					
			Changes:	Changes:										
Scope of human right policy (element) or guidance			show history											
 None Security forces and human rights Human trafficking Indigenous peoples Other Assessment and management of risks and responsibilities relating to security	ty f	Comments Insert a reference We have designated economic, environmental and social responsibilities as the key elements of our sustainable management. We are committed to continuing to identify our various stakeholders, build positive relationships with them and ultimately enhance our value for both the company and the stakeholders. (http://www.samsung.com/uk/aboutsamsung/citizenship/oursustainabilityreports.html)				Sources Samsung_AR_2008.pdf Samsung_SR_2009.pdf Samsung_SR_2010.pdf								
© None	La	bour :	standards											
In development	18	Wor	king conditions	125 / 500 (25.00%)	0	275	107.50				0 3	0 77.5		
Yes, for individual projects/activities	 Child Iai Forced Discrimentary 		t labour	225 / 300 (75.00%)	0	225	92.50				0 2	25 56.4		
Yes, systematically for all relevant projects/activities			ed labour	125 / 300 (41.67%)	0	195	95.00				0 2	20 56.4		
Ves, with monitoring and improvement plans in place			rimination	175 / 300 (58.33%)	0	200	100.00				0 2	75 91.6		
Assessment and management of risks and responsibilities relating to human	22	Dive	rsity	250 / 500 (50.00%)	0	290	144.00				0 3	75 134.		
		Gen	der	225 / 400 (56.25%)	0	275	132.50				0 3	75 119.		
None In development	24		dom of association and	175 / 300 (58.33%)	0	175	72.50				0 2	50 52.6		
 In development Yes, for individual projects/activities 	-	COIIC	ective bargaining											
 Yes, systematically for all relevant projects/activities 	He	aith a	nd safety											
 Yes, with monitoring and improvement plans in place 		Occ	upational health and safety	500 / 800 (62.50%)	275	675	487.50				0 7	75 357.		
	26	Hea	th and well-being	370 / 700 (52.86%)	0	405	157.50				0 5	75 116.		
	27	Proc	luct integrity and safety	250 / 300 (83.33%)	0	300	175.00				0 3	00 108.		

Standard/customised supplier risk assessment tools

9	elect suppliers			Select countries				Select sectors					
Ś	elect risk categor	ies	_1	Select recommendations				Select spend bands					
<< first < prev 1 2 3 4 5 6 7 8 9 10 <u>next > last >></u> 10 ▼ Total: 1000													
Name	♦ Country risk	Sector 🔶	Sector risk	Total spend	Spend risk \$	Overall risk	Code status 🔶	SAQ status \$	Audit status 🗢	Recommendation			
Supplier 2681538		Metal and mineral industries	3.75	\$25,164,862.64	0.00	2.51	Contacted	To contact	Alternative accepted	SA / briefing			
Supplier 1923559		Plastic and chemical industries	3.75	\$52,212,367.34	0.00	2.57	In dispute	In progress	In progress	SA / briefing			
Supplier 4902006		Plastic and chemical industries	3.75	\$169,273,891.11	0.00	2.58	To contact	Not applicable	In dispute	SA / briefing			
Supplier 8721394		Metal and mineral industries	3.75	\$219,733,630.86	0.00	2.58	In dispute	Not applicable	Contacted	SA / briefing			
Supplier 9040429		Metal and mineral industries	3.75	\$76,702,180.63	0.00	2.58	To contact	In progress	Completed	SA / briefing			
Supplier 2014039		Metal and mineral industries	3.75	\$108,027,007.99	0.00	2.59	Contacted	Not applicable	In dispute	SA / briefing			
<u>Supplier</u> 8913296		Elements and gases	1.25	\$193,999,702.70	0.00	2.61	Completed	Not applicable	To contact	SA / briefing			
Supplier 2601499		Plastic and chemical industries	3.75	\$89,371,823.80	0.00	2.62	Contacted	In progress	In progress	SA / briefing			
Supplier 2775536		Metal and mineral industries	3.75	\$218,562,899.04	0.00	2.62	In dispute	Completed	In progress	SA / briefing			
Supplier 656534		Metal and mineral industries	3.75	\$29,311,975.74	0.00	2.62	In dispute	In progress	Alternative accepted	SA / briefing			

Enables cross-supplier comparison against chosen issues / risks



- FDI benefits from and contributes to sustainable economic growth
- But, in some areas more than others...
- 1) Environment
- 2) Social
- 3) Governance
- Challenge: fin new ways to promote enforcement of ESG criteria into businesses considerations



