

The Natural Capital Declaration and Roadmap

Why is natural capital relevant for financial institutions? Risks and opportunities



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Declaration
Financial sector leadership
on natural capital

Secretariat:



UNEP Finance Initiative
Innovative financing for sustainability



Why is natural capital relevant to financial institutions? Risks and opportunities

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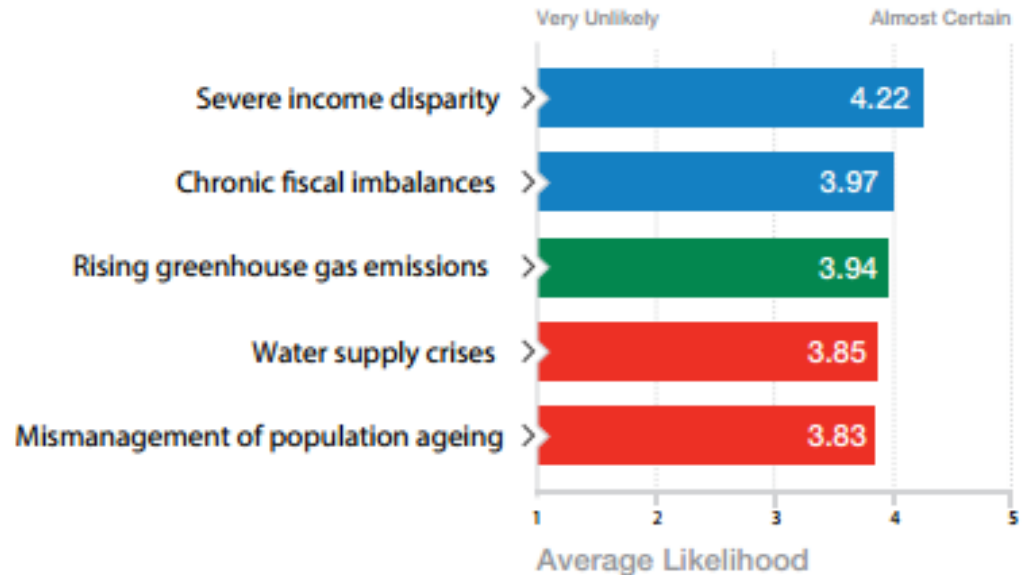


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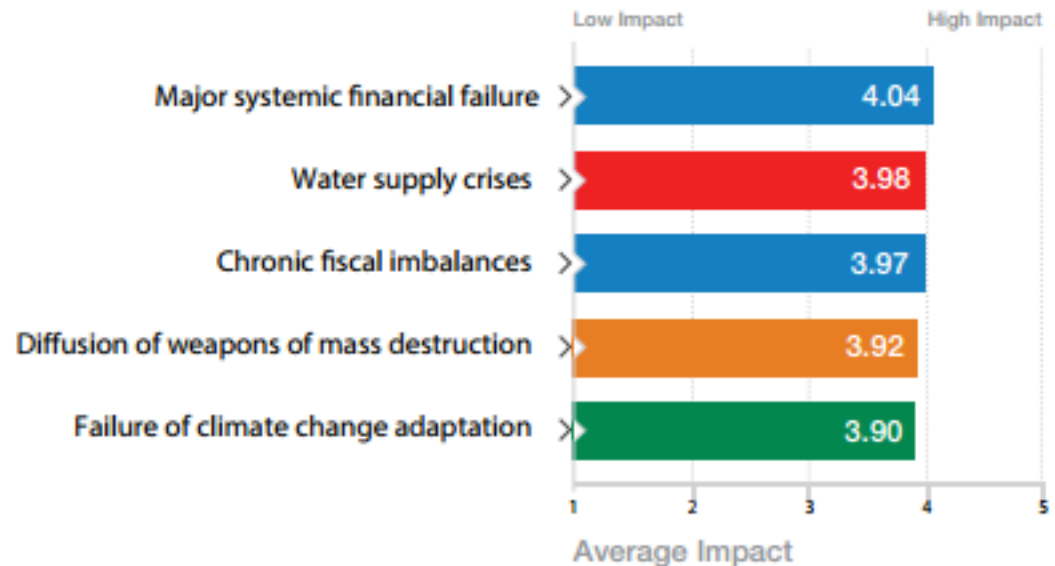


GlobWorld Economic Forum: Global Risks 2014-2024

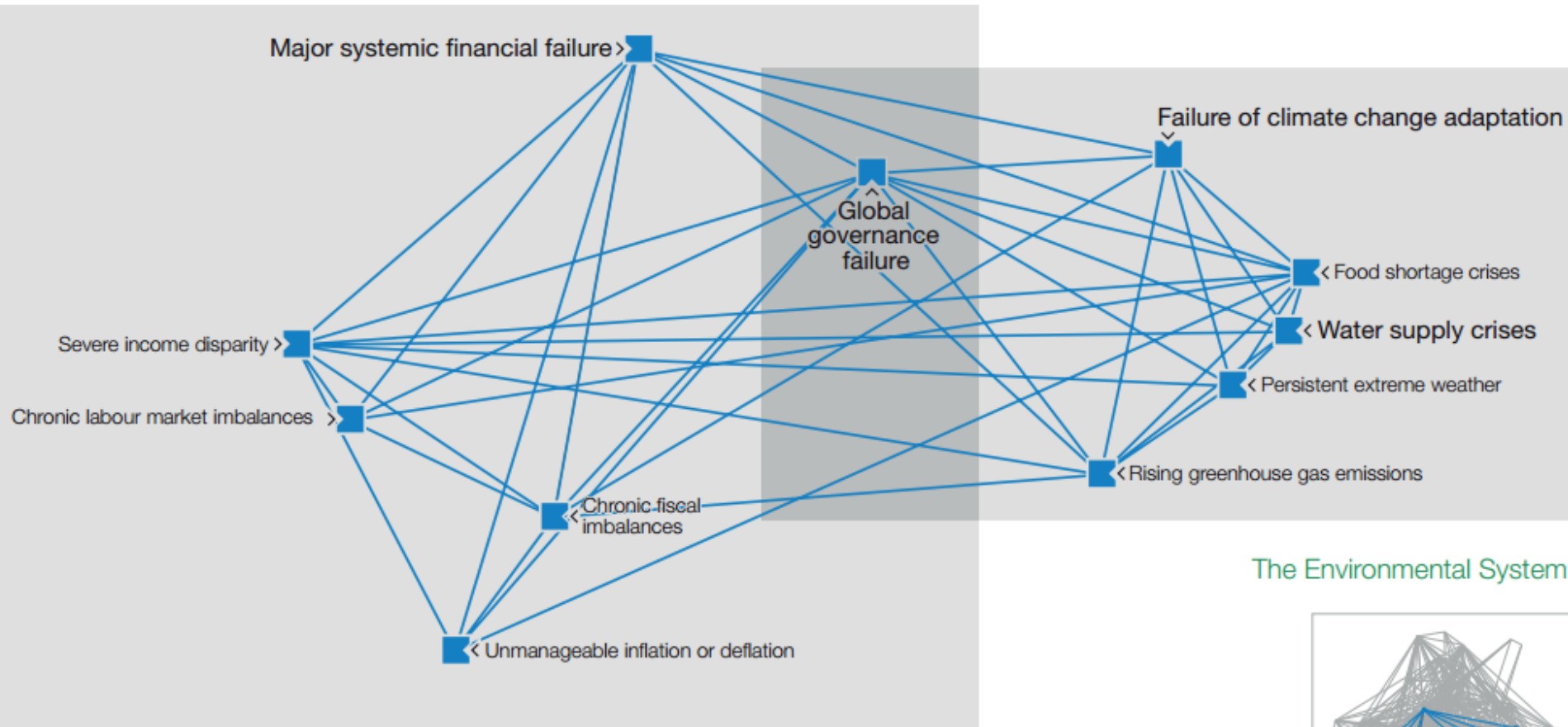
Likelihood



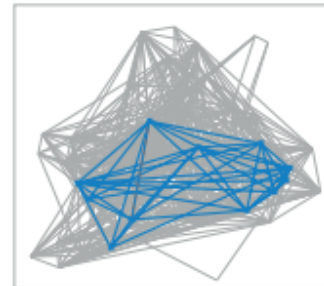
Impact



World Economic Forum: Testing Economic and Environmental Resilience



The Environmental System



The Economic System

How NC is relevant to companies and sectors

Floods cost 35% of US\$192 billion in global economic losses from natural disasters in 2013.

- Floods in Australia disrupted 10%-60% of businesses and led to US\$5.4 bn losses in 2010-11. Construction, retail, farming, mining and tourism most affected.
- Goldman Sachs warned of USD3.7 billion in loans (across financial sector) at risk from floods in Australia (2010-2011)

Drought threatening hydropower capacity in many countries, such as Sri Lanka, China and Brazil.

- Drought in Brazil one of 10 most expensive natural disasters globally in 2013 - \$8 billion in economic losses. Constraining logistics and industrial production.

How NC is relevant to companies and sectors

Water scarcity increasing due to growing population, middle class and changes in rainfall.

- More frequent, erratic and prolonged droughts having more destructive effects on food producers and commodities markets.
- Drought in food-producing regions contributing to rise in global prices of commodities including coffee and palm oil.
- Varied effects on food producers – winners and losers.
- Water risk can affect capex, operating and input costs, license to operate, credit rating, insurance access and brand.
- **Mining industry:** Spending on water up from \$3.4bn in 2009 to nearly \$10bn in 2013. Rio Tinto and BHP Billiton spending \$3bn on desalination plant in Chile to pump seawater to copper mine.

How NC is relevant to companies and sectors

- **Since 2011 companies have spent more than US\$84 bn worldwide to conserve, manage or obtain water.**
- **Investors asking for information on water risks:** 530 investors with US\$57 tn in assets support CDP requests to FTSE Global 500 companies for information on water-related risks and opportunities for their businesses.
- **Business risk:** 70% of the 180 responding in 2013 said water was a substantive risk to their business, up from 59% in 2011.
- **Severe drought in California** - \$2.2 billion economic cost.
- Deforestation in Amazon rainforest could affect water and food supplies in western United States. Regulators may allow projects to curb tropical deforestation into state's carbon trading system.

How NC is relevant to companies and sectors

Deforestation in Amazon predicted to cause large changes in rainfall and temperature in the region.

- Land use conversion to produce agricultural commodities drives up to 80% of global forest loss.
- Forest clearance for cattle and soy can damage agricultural productivity and increase greenhouse gas emissions.
- Climate change a “threat multiplier” to food, water and energy security in Amazonia. **Could lead to loss of rainforest by 2100.**
- **NCD study on bank and investor risk policies for soft commodities:** Framework to evaluate management of deforestation and forest degradation risk in value chains with recommendations for UN-REDD countries.

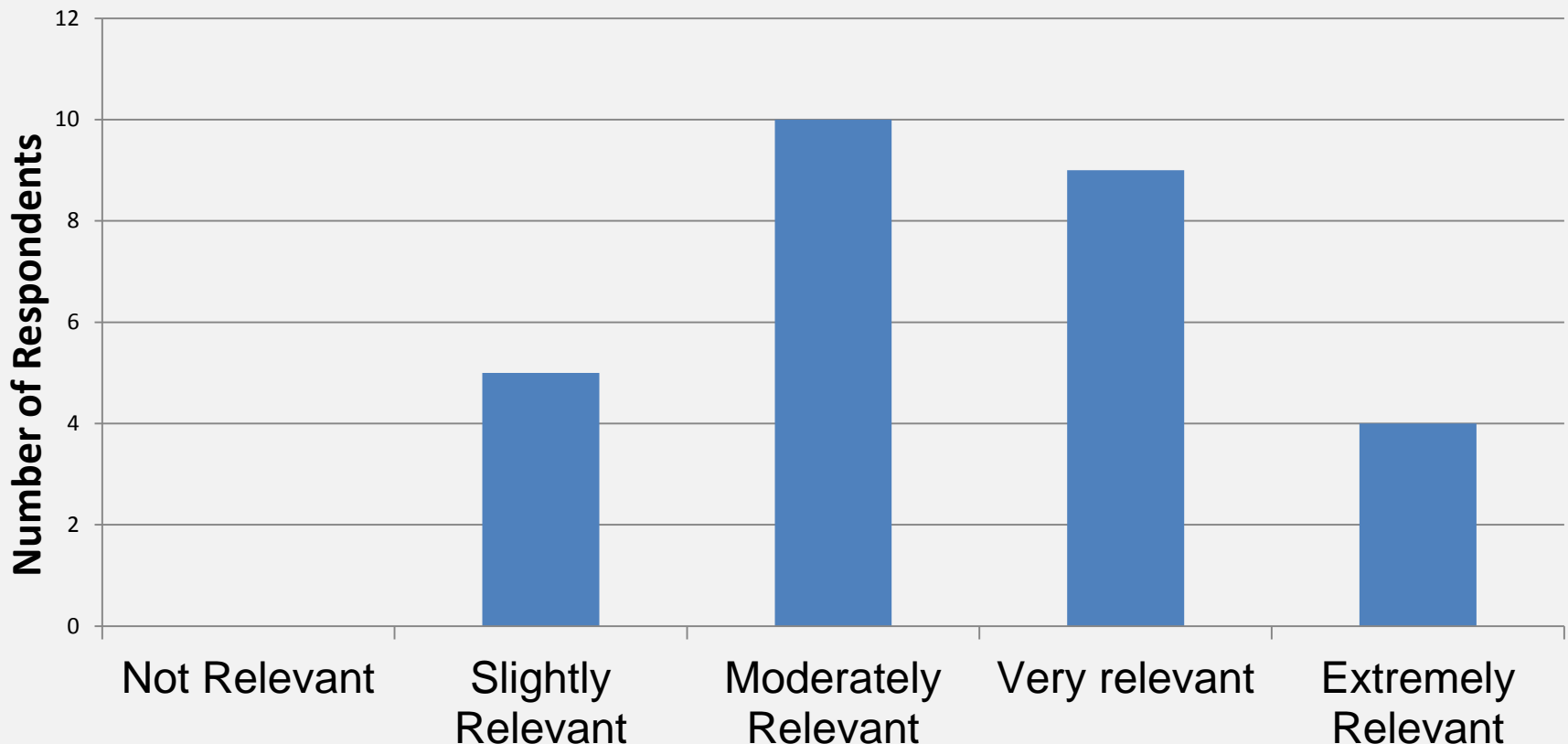
Relevance of natural capital to financial institutions

- 94% of commitments by 43 countries to implement [Nationally Appropriate Mitigation Actions](#) aim to cut emissions from agriculture and forestry. Brazil NAMA: 36-39% -2020.
- **Potential “stranded assets” – Value at Risk + opportunities**
- Risks to loan repayments and value of collateral for companies exposed to deforestation.
- Opportunities - sustainable finance, green bonds, high value carbon stock - assets and revenue streams.
- Consumer Goods Forum companies adopting “no net deforestation” policy in supply chains 2020.
- Banking Environment Initiative – 8 banks adopted “Soft Commodities Compact” to help transform supply chains.

Relevance of natural capital to financial institutions

IFC/NCD Scoping Study preliminary findings: 30/100 FIs surveyed.

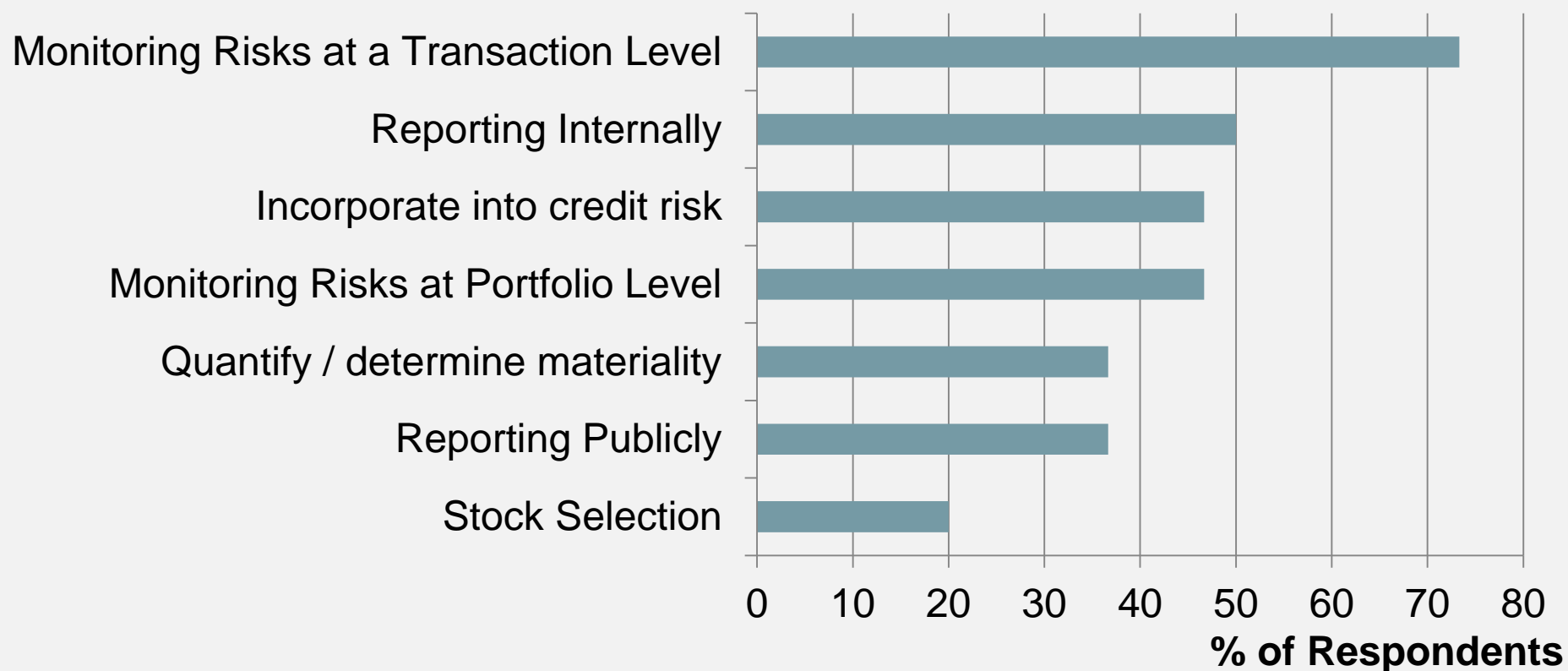
Relevance of natural capital issues to FIs' core business strategy and/or portfolio risk management



Relevance of natural capital to financial institutions

Preliminary findings: IFC/NCD scoping study survey (30/100 FIs).

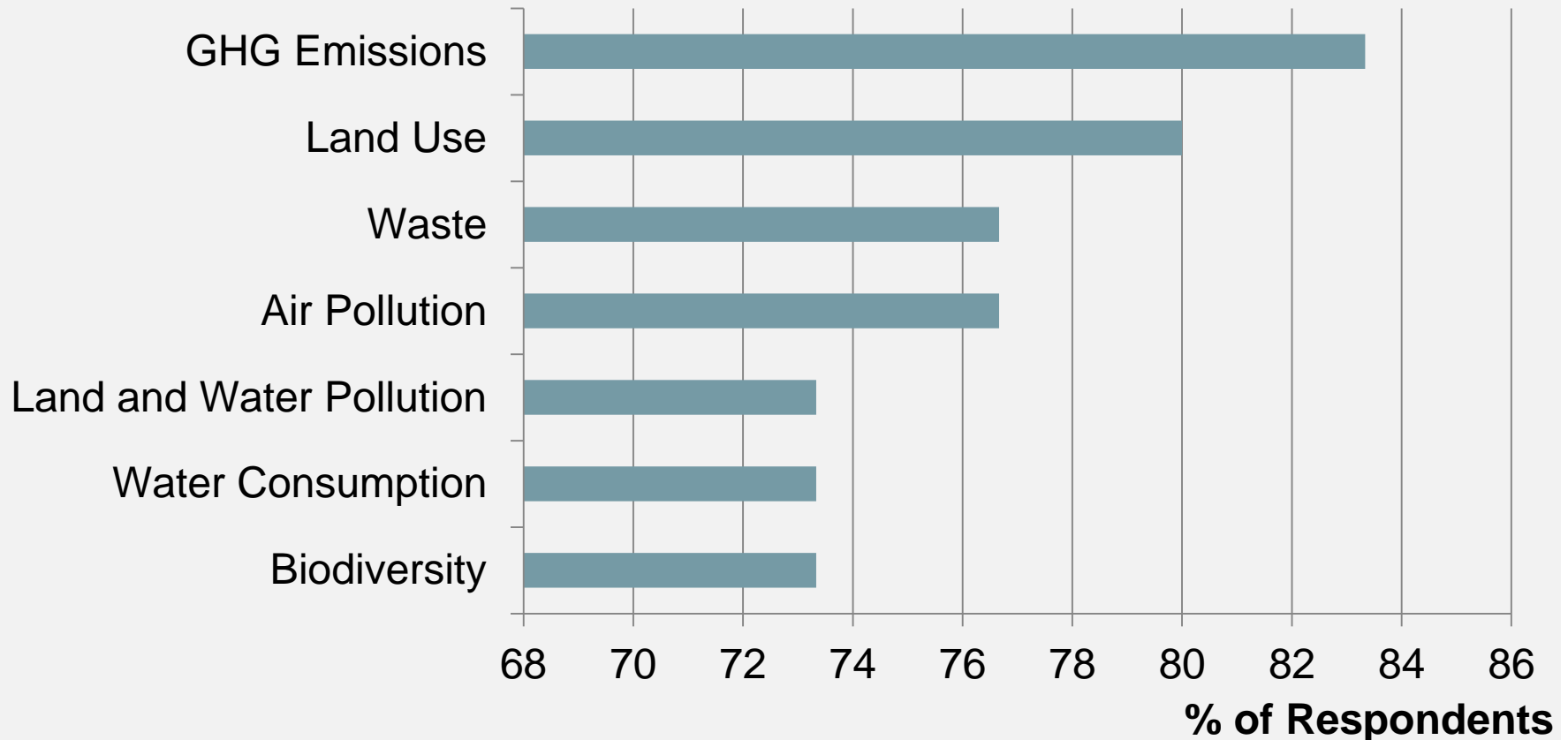
Most common implementation of natural capital considerations



Relevance of natural capital to financial institutions

Preliminary findings: IFC/NCD scoping study survey (30/100 FIs).

Most Important NC Risk Indicators for FIs



Risks

- External environmental costs = >11% of GDP, rising to 18% by 2050 (PRI, 2010)
- Weaker company cash flows could affect capital investment in growth opportunities, lowering dividends and long-term asset values.
- Lower than expected output can translate into financial risk.
- Resource and pollution constraints and policy measures to correct price signals will increasingly affect corporate value and Value at Risk – stress testing needed to assess probability of unanticipated change in financial ratios.



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Environmental costs internalised

Almond prices rocket due to honey bee shortage

Honey bees have declined by 40pc causing a reduction in almond production in California with almond growers forced to pay thousands for pollination



Environmental costs internalised

Canadian beekeepers sue Bayer and Syngenta over neonicotinoid pesticides

Class action lawsuit seeks \$400 million in damages

CBC News | Posted: Sep 03, 2014 1:48 PM ET | Last Updated: Sep 05, 2014 4:49 PM ET



Risks

- Climate change impact costs could accumulate to US\$4 trillion by 2030.

Source of investment risk

Fundamental factors	Market factors	Climate change factors
Economic cycle sensitivity	Equity risk premium	Technology (low carbon)
Inflation sensitivity	Volatility	Impact (physical)
		Policy (climate)

Source: Mercer

- Mercer study recommended new approaches to strategic asset allocation to tackle fundamental shifts in global economy due to climate change.

Risks

- Equity Risk Premium used in finance models reflects how much risk in market and price attached to that risk (Mercer, 2011).
- Drivers of ERP and possible link to climate change factors:
 - 1. Risk aversion** may increase where CC increases uncertainty and due to costly and unanticipated adjustments in economy.
 - 2. Degree of uncertainty** about risks linked to technology, climate policy and physical impacts.
 - 3. Level and reliability of available information** could make investors less certain about the future and lead to higher risk premiums.
 - 4. Catastrophe/Event risk:** Potentially large and persistent risks related to water or resource scarcity (creating geopolitical tensions) and large-scale weather events.

Opportunities

IFC to issue first retail green bond



Source: Flickr

3 Dividend Stocks That Turn Everybody's Trash Into Cash

BY DAN BURROWS

Dividend stocks in the boring waste management industry offer steady cash flow for payouts and buybacks -- and less volatility, too. [Read >](#)

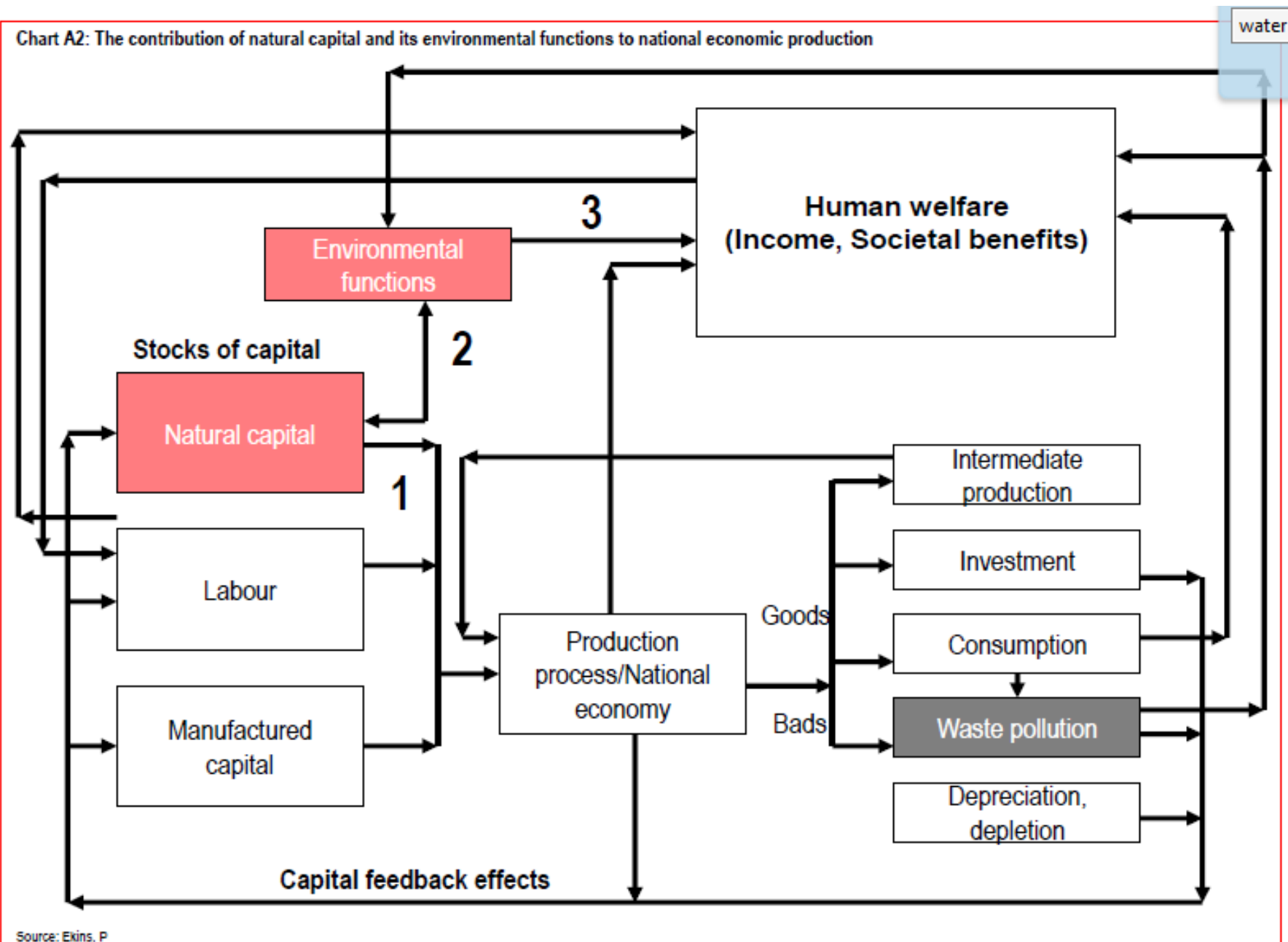


Morgan Stanley offers clients more sustainable investment options

Financial institution preparedness

- **Banking E&S policies and management systems**
- **Responsible investment** - due diligence integrating environmental, social, and corporate governance (ESG) factors that can contribute to maximizing risk-adjusted returns. ESG issues expected to impact company (i.e. capital market performance) long term, e.g. natural resource constraints (Mercer, 2014)
- **Thematic products** such as climate funds and impact investing.

Chart A2: The contribution of natural capital and its environmental functions to national economic production



Source: Ekins, P

Source: HSBC, 2013

Challenge

Video



McKinsey, 2014

http://www.mckinsey.com/client_service/sustainability/latest_thinking/resource_revolution_book



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Challenge

UNEP Inquiry: Design of a Sustainable Financial System to advance options to deliver a step change in the financial system's effectiveness in mobilizing capital towards a green and inclusive economy. Smith School study (2014):

- 1/ Environmental change, natural capital depletion and degradation could pose systemic risks to financial stability.
- 2/ NC underpins health of global economic and financial systems.
- 3/ Public policy responses to environment-related risks can impact financial system and financial stability. E.g. trade policy.
- 4/ Indirect exposure of FIs to natural capital risks may have equally costly impacts on balance sheets and system function as firms with clear direct links to natural capital value.
- 5/ More data and research and inclusion of environment in investment agenda could create meaningful and catalytic change.

NCD approach to natural capital

- The stock of ecosystems that yields a renewable flow of goods and services that underpin the economy and provide inputs and benefits to businesses and society (e.g. food, fibre, water, energy, timber, climate security).
- One factor of ESG considerations that can be material to financial institutions, mainly through loans or investments.
- 40+ financial institutions globally developing more comprehensive approaches to understand and integrate natural capital factors into products and services.
- R&D projects to develop and test approaches to quantify, evaluate and embed natural capital across portfolios.
- GIS data and tools – spatial analysis of ecosystems .



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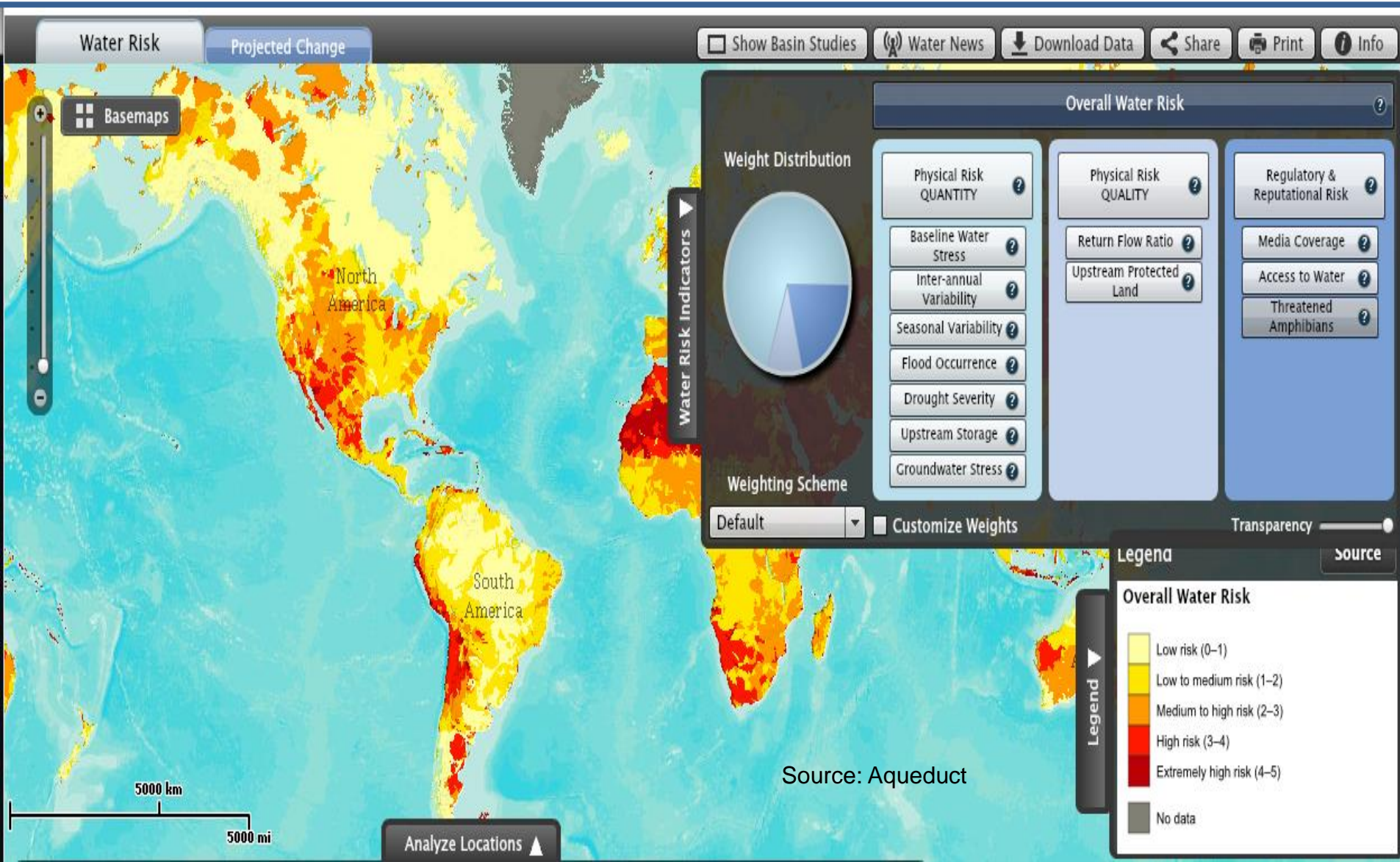


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GCP
GLOBAL CANOPY PROGRAMME

NCD approach to natural capital



Thank you

Obrigada

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