Workshop on Natural Capital

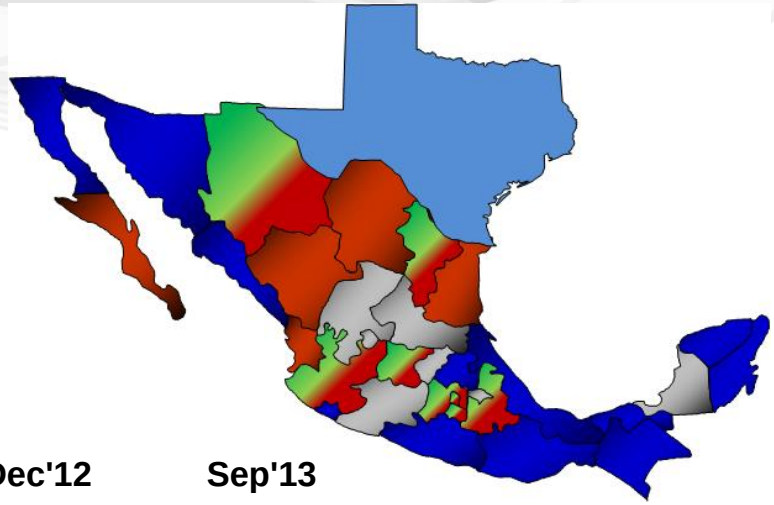
Understanding Risks and Opportunities for Financial Institutions

September 23rd, 2014

BANORTE

IXE

From Regional to National Bank

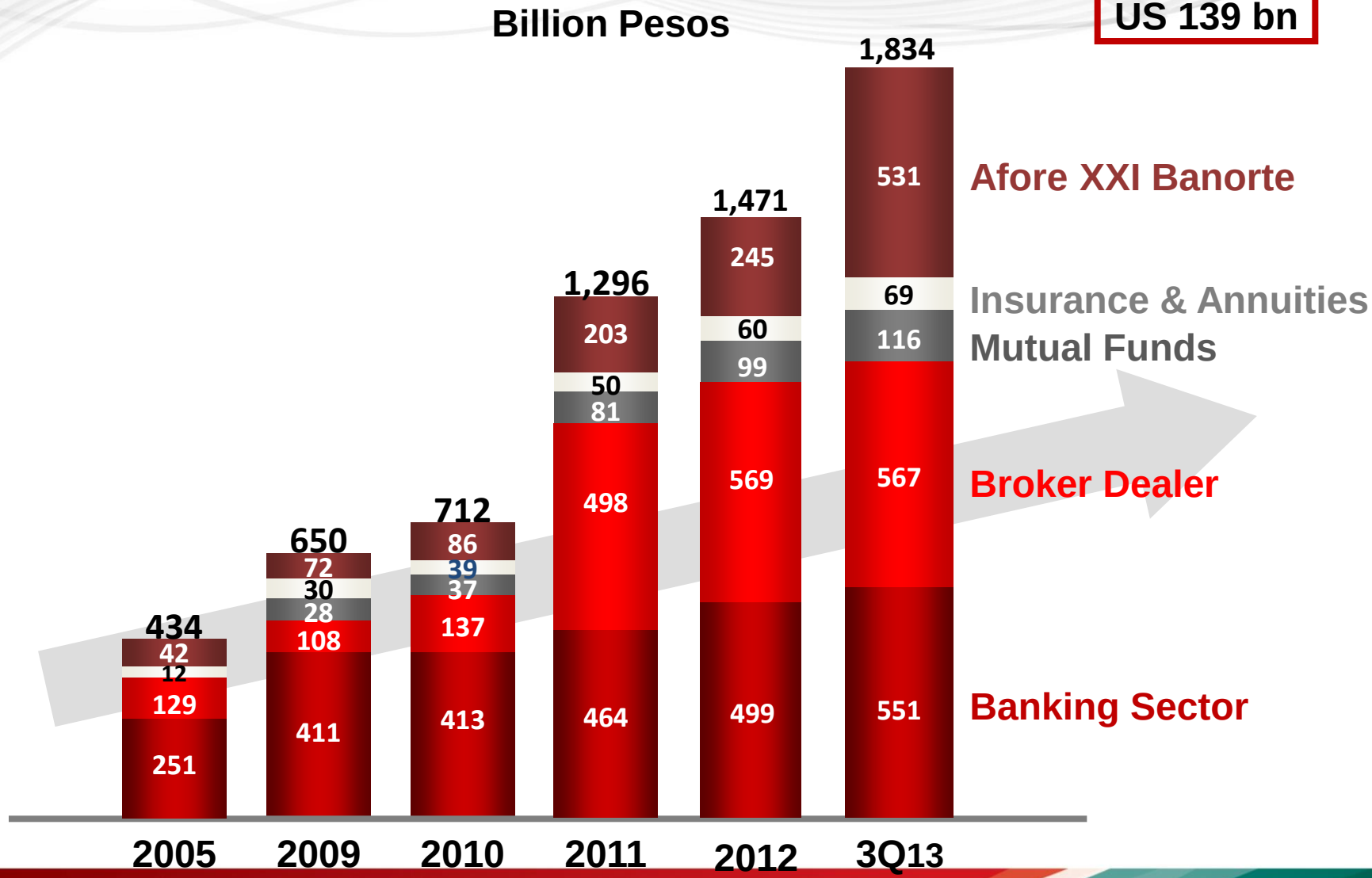


	Dec '96 BTE		Dec '01 BTE + BCN + BPS + BCR		Dec'11 BTE + IXE		Dec'12 BTE + IXE		Sep'13 BTE + IXE	
Branches	156	14°	1,182	4°	1,285	3°	1,316	3°	1,286	3°
States (Mex.)	7		32		32		32		32	
Individual Clients & SMEs (MM)	0.6		3.0		9.8		11.3		12.4	
Branch Employees (1)	4,840		15,099		18,742		20,964		20,851	
Deposits (2)	3.0%	14°	11.7%	4°	15.0%	3°	16.5%	3°	17.4%	3°
Loan Portfolio (2)	3.3%	10°	8.6%	4°	15.8%	3°	16.8%	3°	16.6%	3°

(1) During 2012, there was a transfer of personnel from Ixe subsidiaries and Casa Bolsa Banorte to Banorte's payroll.
(2) Includes the 7 largest banks

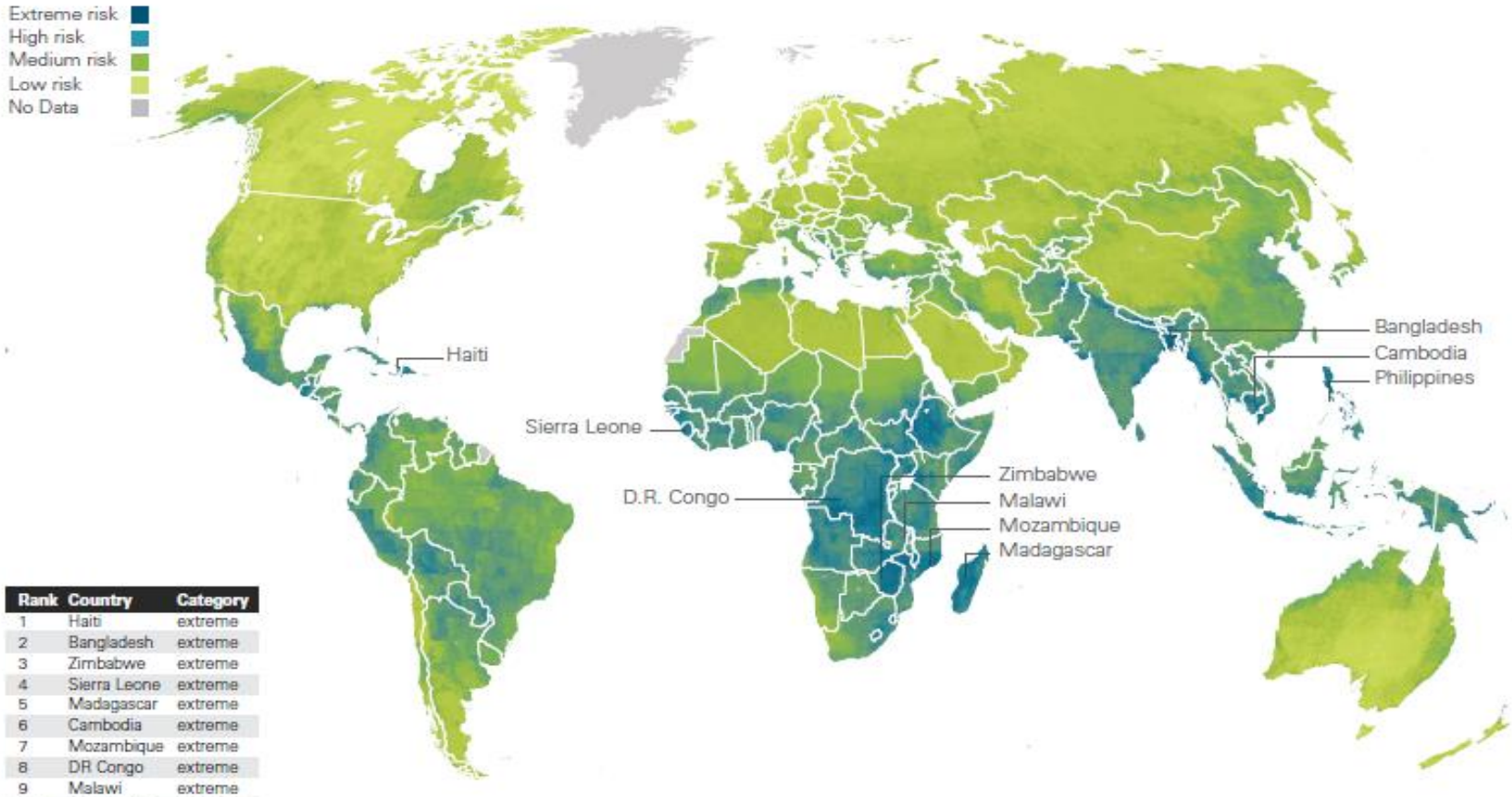
Rapid Growth in Assets under Management

US 139 bn



Increasing Climate Change Vulnerability

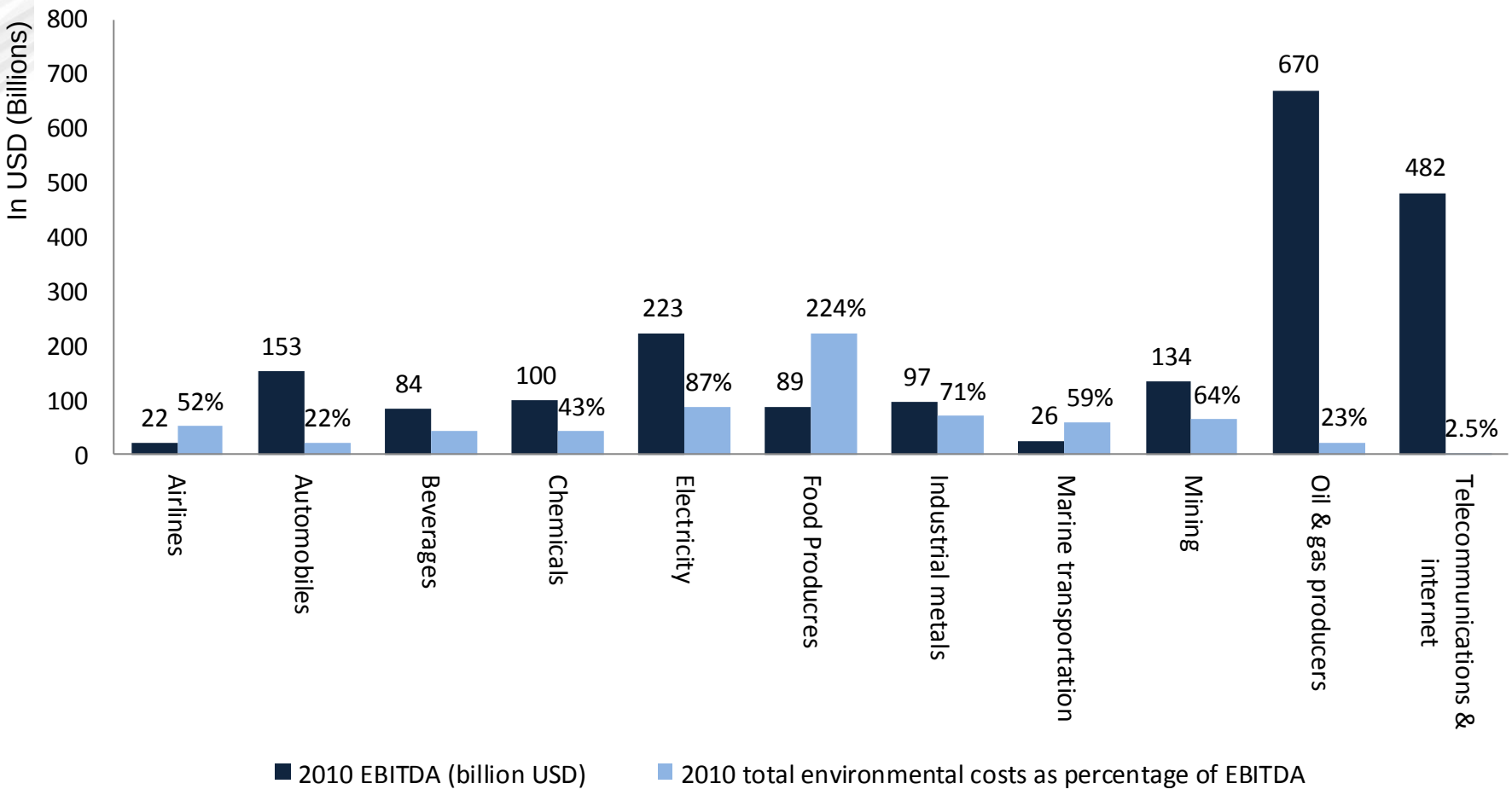
Figure 6: Climate change vulnerability index 2012



Rank	Country	Category
1	Haiti	extreme
2	Bangladesh	extreme
3	Zimbabwe	extreme
4	Sierra Leone	extreme
5	Madagascar	extreme
6	Cambodia	extreme
7	Mozambique	extreme
8	DR Congo	extreme
9	Malawi	extreme
10	Philippines	extreme

Source: Maplecroft. (2012). The Climate Change and Environmental Risk Atlas. Available at http://maplecroft.com

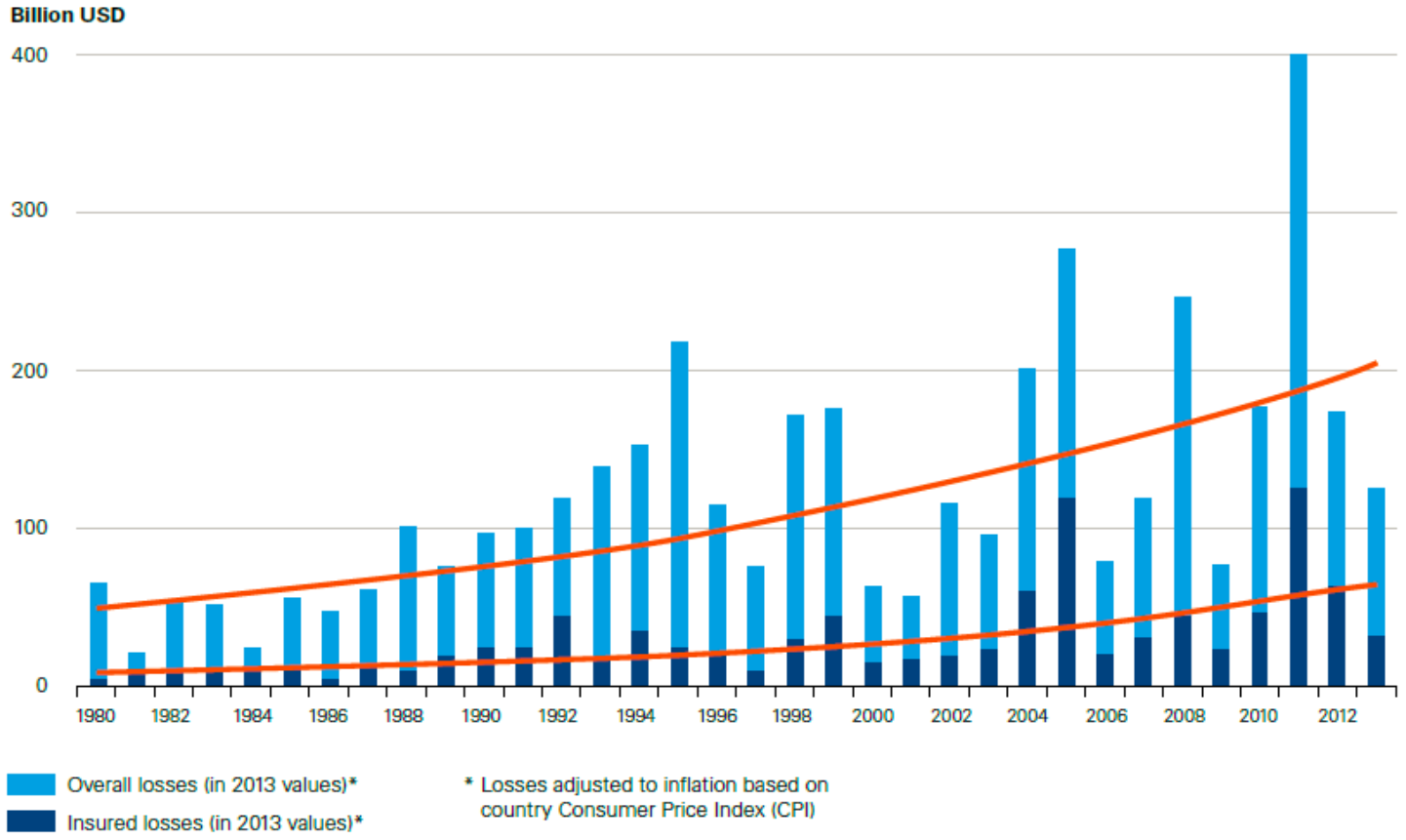
Negative environmental externalities across 11 sectors



Source: KPMG Expect the Unexpected, 2012

Increasing losses due to natural disasters and extreme weather

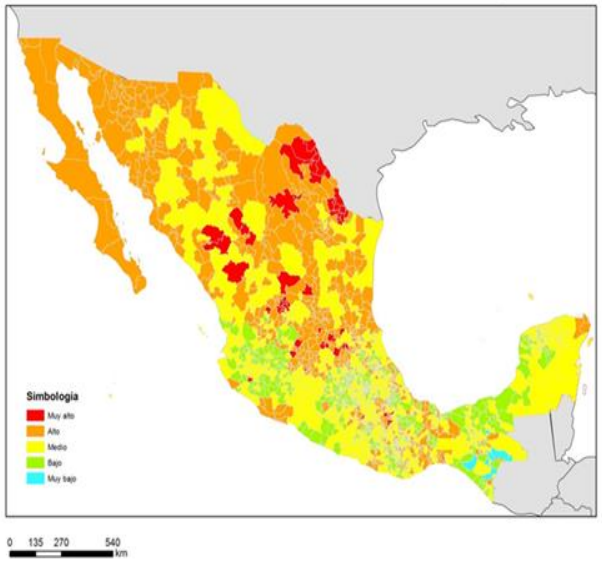
Figure 8 / Increasing losses due to natural disasters and extreme weather



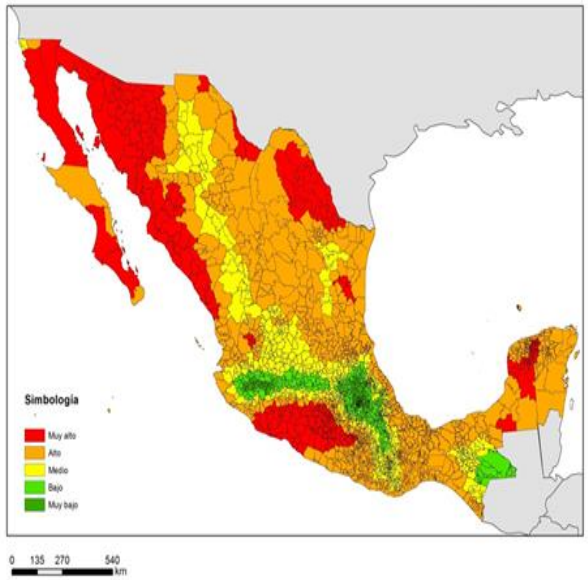
Source: © 2014 Münchener Rückversicherungs-Gesellschaft, NatCatSERVICE

Mexico Vulnerability to Climate Change

Its location between two oceans, latitude and reliefs, expose the country to diverse weather phenomena.



Drought risk level



Heatwave risk level

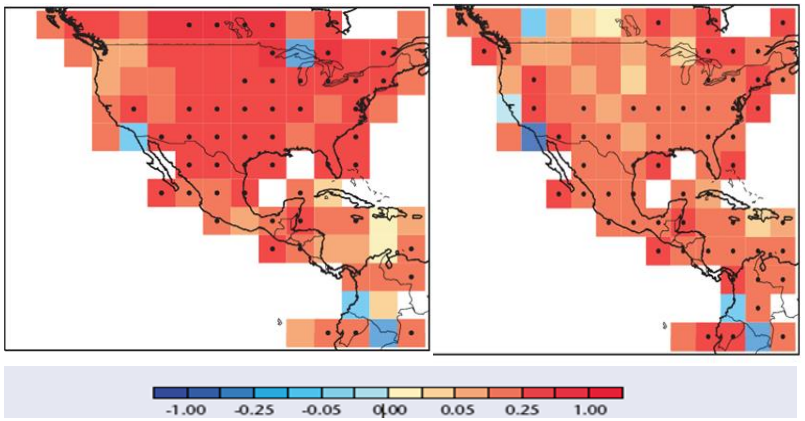
Flood prone areas

Temperature Rise in the Last Fifty Years

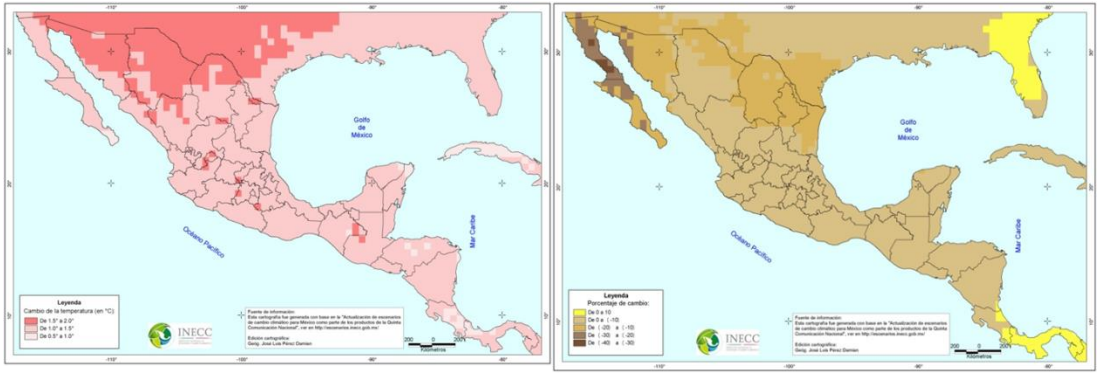
Since the sixties, Mexico has become warmer.

The average temperature has increased 0.85 ° C, a figure that matches the overall increase reported by the IPCC.

Rainfall has decreased in the southeast of the country for half a century.



Climate Change Scenarios for Mexico



In most of the country, temperatures are projected to rise 1° C to 1.5° C by 2015-2039 and in the north the increase could reach 2° C.

The trend of declining rainfall varies in a range between 10 and 20%.

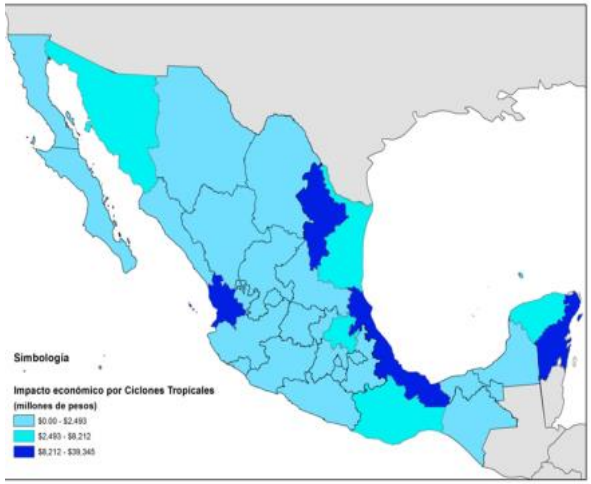
Social and Economic Vulnerability to Climate Change

- It is estimated that 68% of the population has been affected by disasters, a figure that coincides with the groups in poverty and extreme poverty.

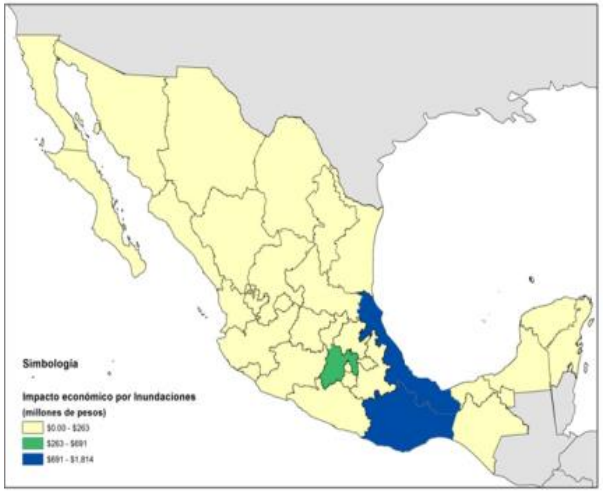
- The economic impacts have increased from an annual average of 730 million pesos in the period 1980-1999 to 21.950 million from 2000-2012 **(30 times more)**.

Economic impact in millions of pesos for the period 2000-2012

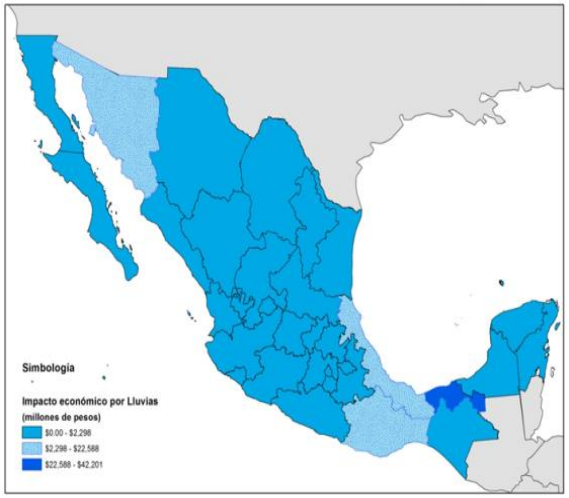
Tropical cyclone
$2,493 to $39,345



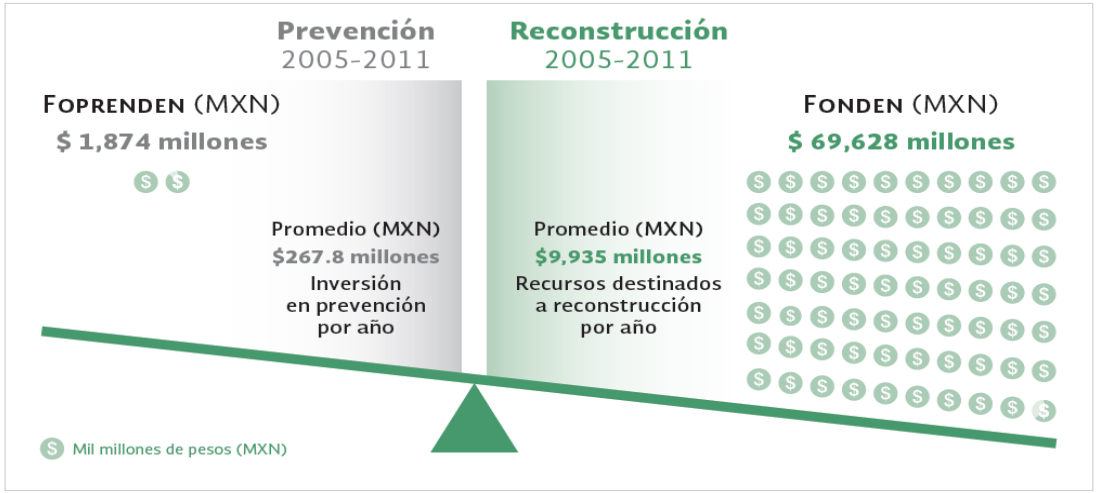
Floods
$263 to $1,814



Railfall
$2,298 to $42,201



Comparison of government budget assignments for prevention and reconstruction



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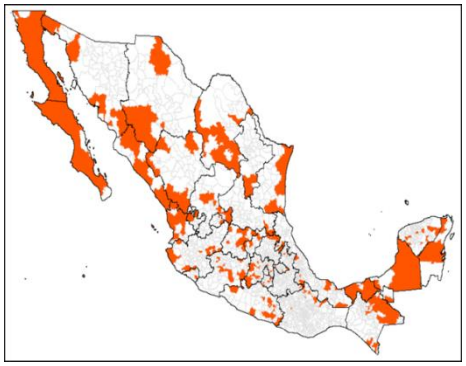
times more budget for post-distaster reconstruction than prevention.

Vulnerable municipalities



319 municipalities are highly vulnerable to climate change (13% of total).

Climate Change Impact in Mexico: 2013/2014 Flooding

2013: Guerrero (Ingrid & Manuel)

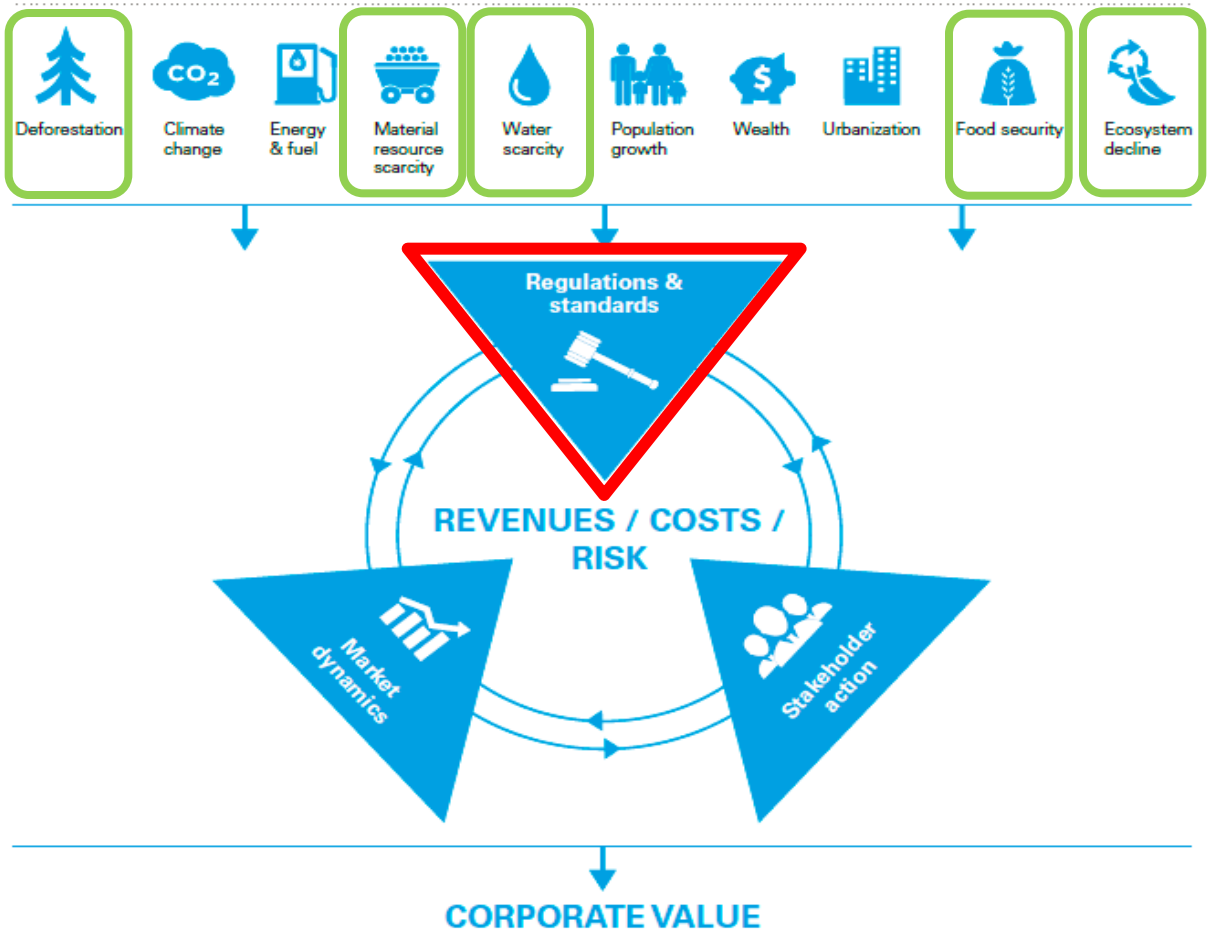
1,250 million dollars (0.1 GDP Points) and 3,760 million dollars (0.3 GDP points)

2014: Baja California Sur (Odile)

30,000 people without homes and counting…
>153 million dollars

Natural Capital: Drivers of Internalization

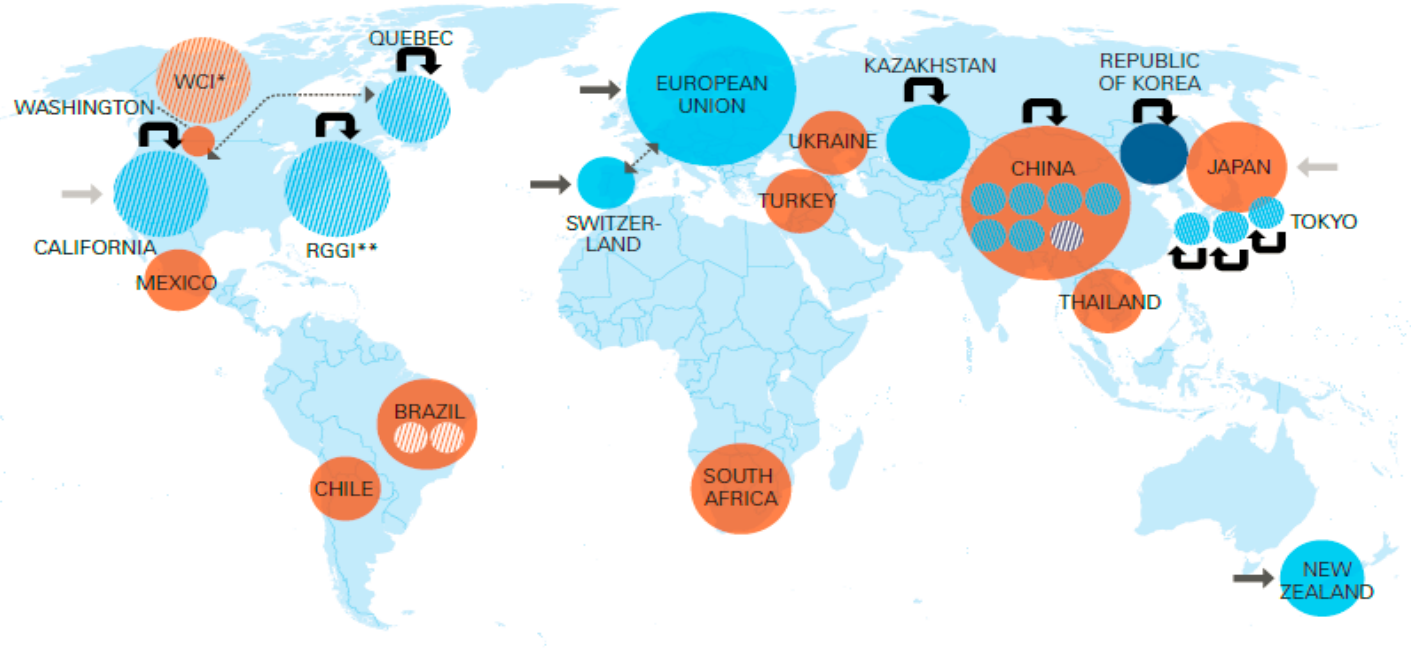
Figure 4 / Three drivers of internalization



Source: KPMG (2014). *A New Vision of Value: Connecting corporate and societal value creation.*

Drivers of Internalization: Regulation & Standards

Figure 6 / Map of existing, emerging and potential emissions trading schemes



Status of implementation

- Implemented (in force with established rules)
- Implementation scheduled (mandate agreed, start date communicated, rules in preparation)
- Under consideration*** (government gave public signal towards the development of an Emission Trading Scheme)

- National
- Sub-national or regional

Offsetting

- CDM and JI credits
- Bilateral offsets
- Domestic offsets

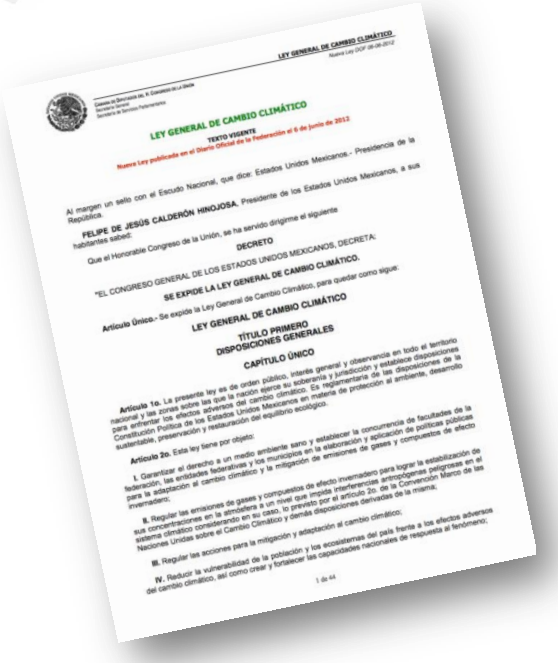
Linking

- Planned link

* WCI - Western Climate Initiative. Participating jurisdictions are British Colombia, California, Manitoba, Ontario and Quebec
** RGGI - Regional Greenhouse Gas Initiative
*** Schemes under consideration are at different stages in the process

Drivers of Internalization: Regulation & Standards

Climate Change National Law



LEY GENERAL DE CAMBIO CLIMÁTICO

Nueva Ley DOF 06-06-2012

LEY GENERAL DE CAMBIO CLIMÁTICO

TEXTO VIGENTE

Nueva Ley publicada en el Diario Oficial de la Federación el 6 de junio de 2012

Al margen un sello con el Escudo Nacional, que dice: Estados Unidos Mexicanos.- Presidencia de la República.

FELIPE DE JESÚS CALDERÓN HINOJOSA, Presidente de los Estados Unidos Mexicanos, a sus habitantes sabed:

Que el Honorable Congreso de la Unión, se ha servido dirigirme el siguiente

DECRETO

"EL CONGRESO GENERAL DE LOS ESTADOS UNIDOS MEXICANOS, DECRETA:

SE EXPIDE LA LEY GENERAL DE CAMBIO CLIMÁTICO.

Artículo Único.- Se expide la Ley General de Cambio Climático, para quedar como sigue:

LEY GENERAL DE CAMBIO CLIMÁTICO

TÍTULO PRIMERO
DISPOSICIONES GENERALES

CAPÍTULO ÚNICO

Artículo 1o. La presente ley es de orden público, interés general y observancia en todo el territorio nacional y las zonas sobre las que la nación ejerce su soberanía y jurisdicción y establece disposiciones para enfrentar los efectos adversos del cambio climático. Es reglamentaria de las disposiciones de la Constitución Política de los Estados Unidos Mexicanos en materia de protección al ambiente, desarrollo sustentable, preservación y restauración del equilibrio ecológico.

Artículo 2o. Esta ley tiene por objeto:

I. Garantizar el derecho a un medio ambiente sano y establecer la concurrencia de facultades de la federación, las entidades federativas y los municipios en la elaboración y aplicación de políticas públicas para la adaptación al cambio climático y la mitigación de emisiones de gases y compuestos de efecto invernadero;

II. Regular las emisiones de gases y compuestos de efecto invernadero para lograr la estabilización de sus concentraciones en la atmósfera a un nivel que impida interferencias antropógenas peligrosas en el sistema climático considerando en su caso, lo previsto por el artículo 2o. de la Convención Marco de las Naciones Unidas sobre el Cambio Climático y demás disposiciones derivadas de la misma;

III. Regular las acciones para la mitigación y adaptación al cambio climático;

IV. Reducir la vulnerabilidad de la población y los ecosistemas del país frente a los efectos adversos del cambio climático, así como crear y fortalecer las capacidades nacionales de respuesta al fenómeno;

1 de 44

OBJECTIVES ON ADAPTATION

1. Reduce the vulnerability of the population, ecosystems and infrastructure from the adverse effects of climate change.

2. Minimize risk and damage considering current and future climate change scenarios.

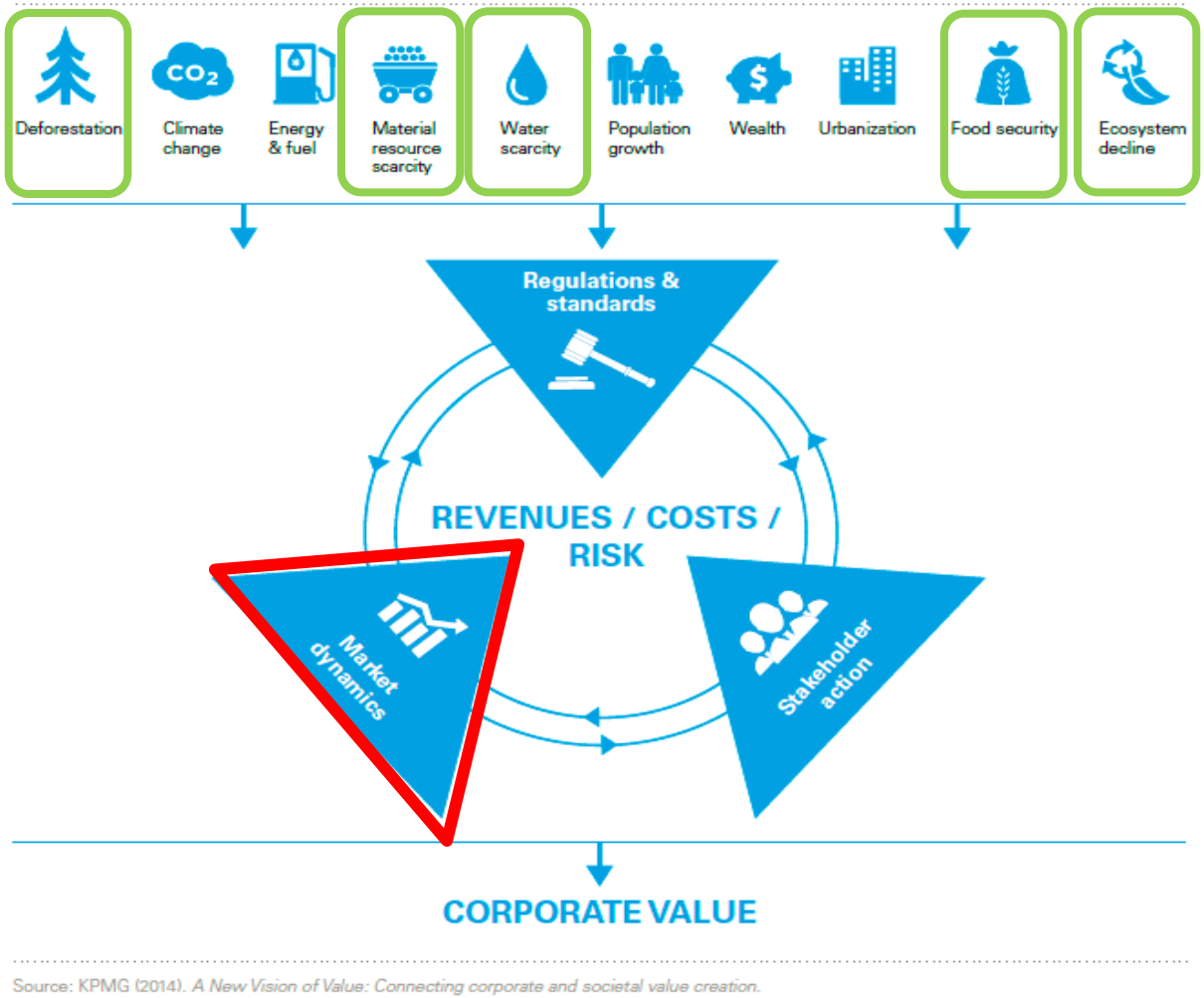
3. Identify the vulnerability and capacity of adaptation and transformation of ecological and social systems.

4. Establish mechanisms for immediate attention to those areas impacted by climate change.

5. Facilitate and promote food security.

Natural Capital: Drivers of Internalization

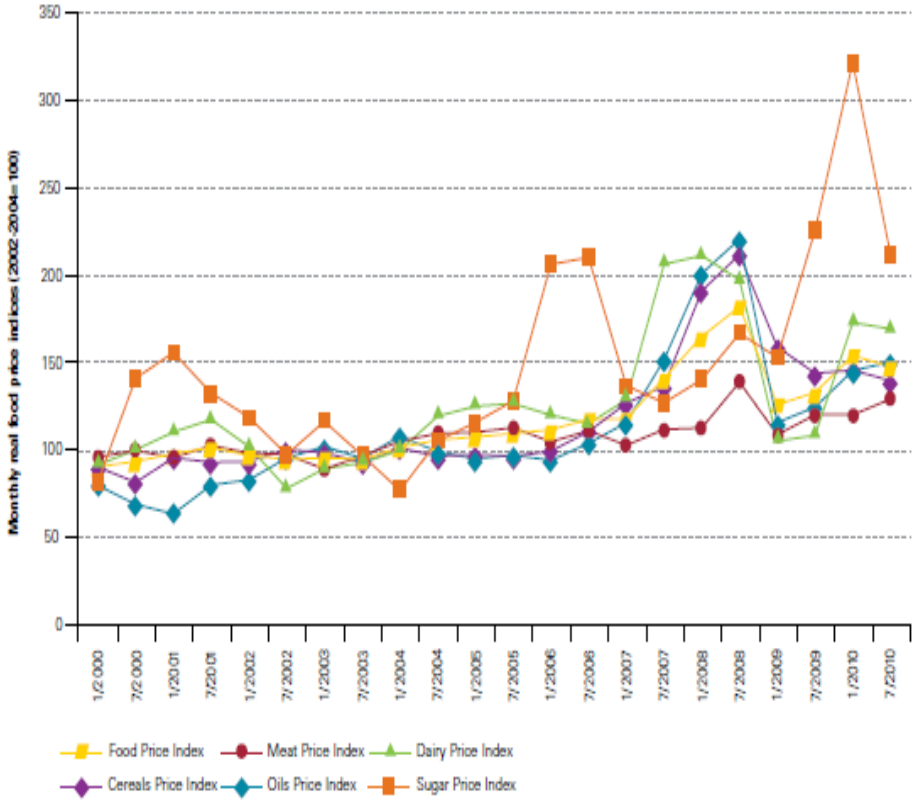
Figure 4 / Three drivers of internalization



Source: KPMG (2014). *A New Vision of Value: Connecting corporate and societal value creation.*

Drivers of Internalization: Market Dynamics

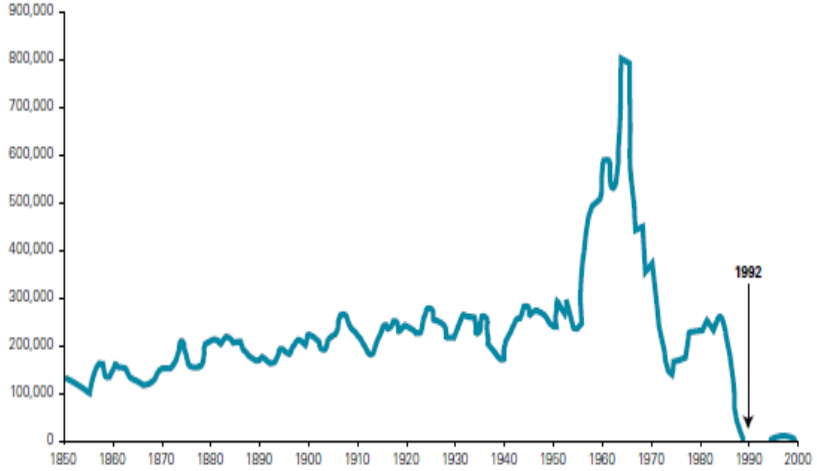
- Commodity prices are becoming increasingly volatile



Source: KPMG. (2012). Based on Food and Agriculture Organization of the United Nations's Global Information and Early Warning System (FAO/GIEWS) database. Available at http://www.fao.org/giews/

Figure 17: Atlantic cod stocks

Fish landings in tons



Source: UNEP/GRID-Arendal. (2005). Collapse of Atlantic cod stocks off the East Coast of Newfoundland in 1992. UNEP/GRID-Arendal Maps andGraphics Library. (Accessed 2012). Available at: http://maps.grida.no/go/graphic/collapse-of-atlantic-cod-stocks-off-the-east-coast-of-newfoundland-in-1992

- 1992 Collapse of Atlantic cod stocks off the East Coast of Newfoundland
- More ecosystems on the tipping point

Drivers of Internalization: Market Dynamics

Decrease

- Productivity of maize.
- Coniferous forest cover and marine populations.

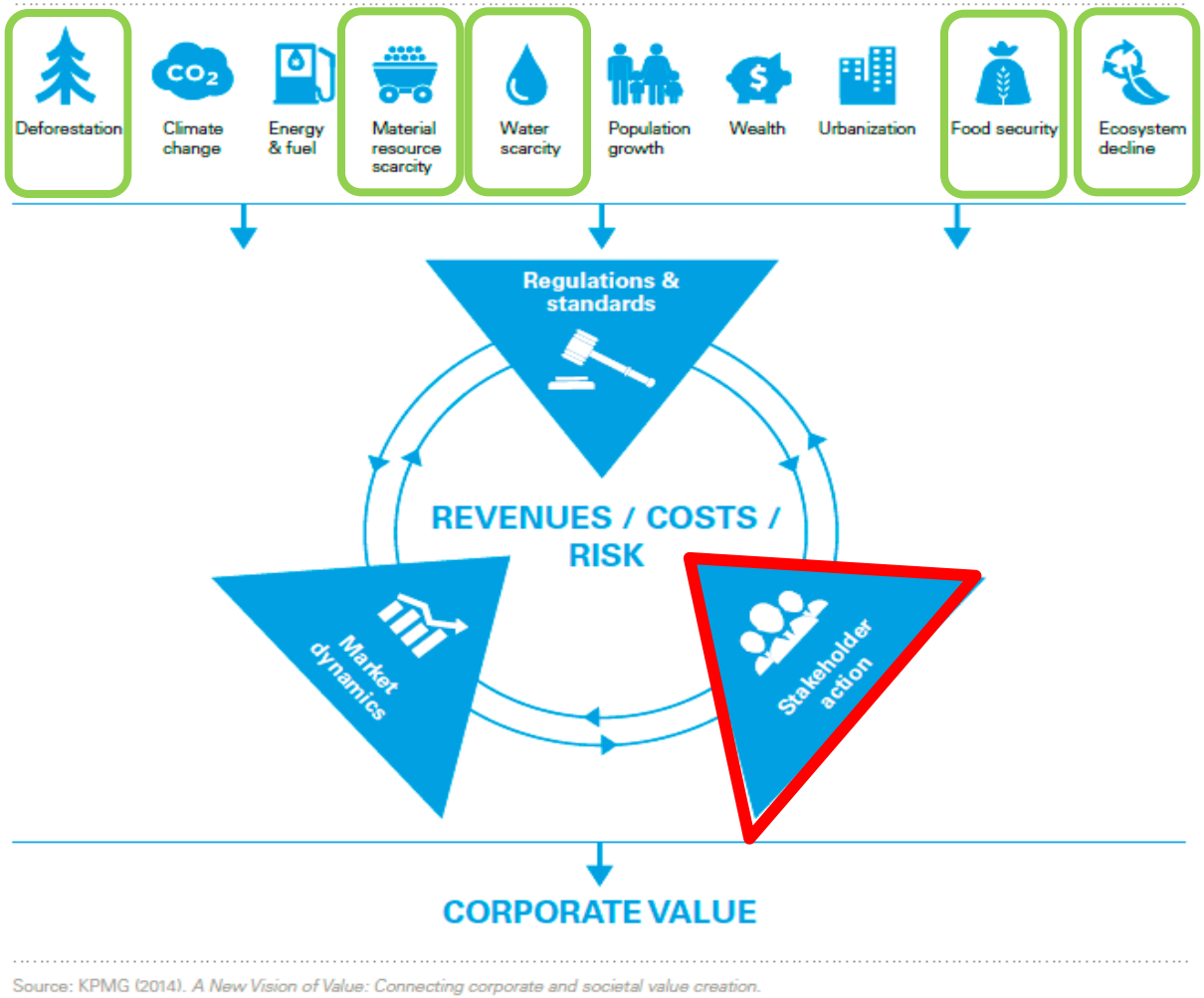
Increase

- Drought.
- Precipitation could be more intense and frequent increasing the risk of flooding.
- Sea level.
- Temperature in the oceans.

The infrastructure may be affected by the increase in number and intensity of tropical cyclones and more intense storm surges.

Natural Capital: Drivers of Internalization

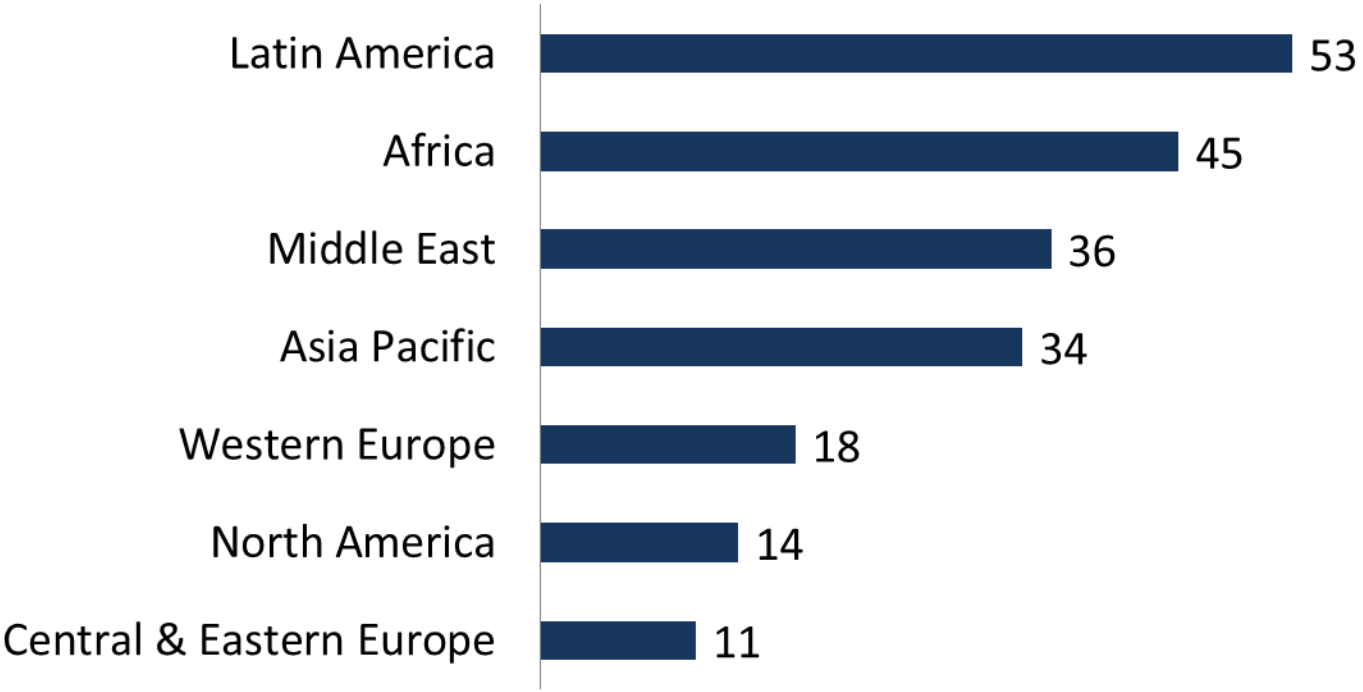
Figure 4 / Three drivers of internalization



Source: KPMG (2014). *A New Vision of Value: Connecting corporate and societal value creation.*

Drivers of Internalization: Stakeholder Action

Respondents who were ´extremely´ or ´somewhat´ concerned about biodiversity loss as a threat to their business growth prospects.

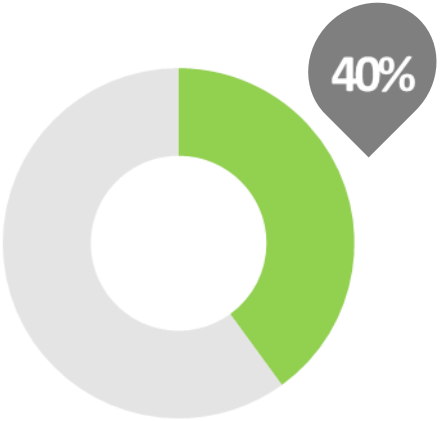


Q: How concerned are you about the following potential threats to your business growth prospects?
Base: All respondents (139,442,289,167,93,28,40) Please note small base for Middle East.

Source: TEEB 2012

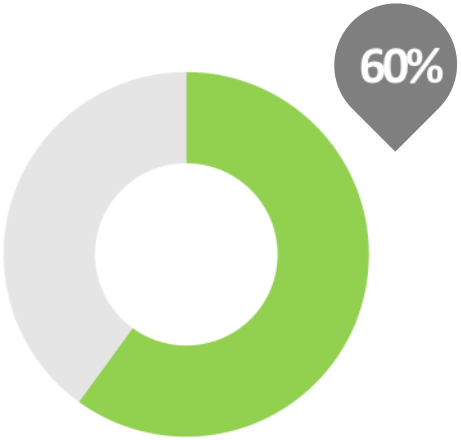
Drivers of Internalization: Stakeholder Action

Our Investors



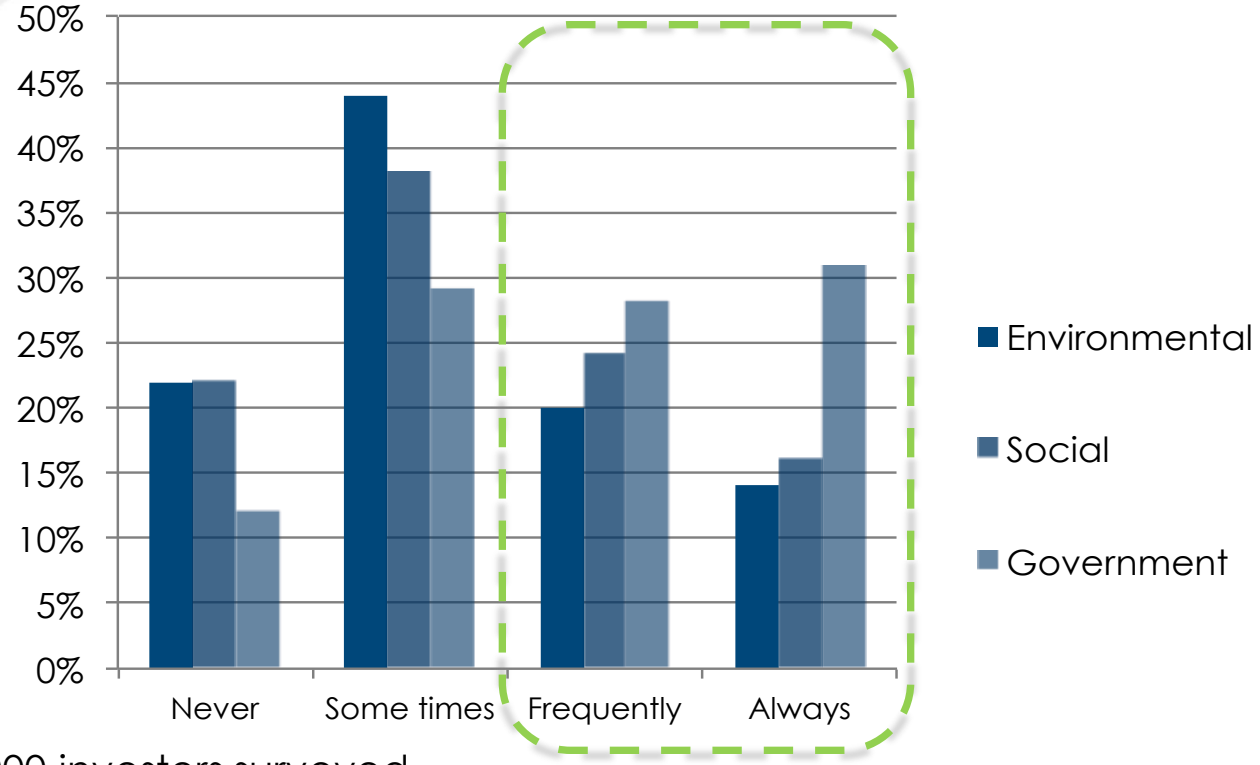
40%
of our top 10 investors signed the **PRI**

60%
of our top 10 investors has an **ESG policy**



Drivers of Internalization: Stakeholder Action

How often investors consider ESG



Up to 59% of investors consult ESG info frequently

- 1000 investors surveyed
- About half of them were research analysts and portfolio managers
- Study of global reach: 33% USA, 8% UK, 6% India, 4% Brazil, 3% China, 3% Germany.

Source: SustainAbility. (December, 2012). *Rate the Raters Phase Five. The Investor View.*

Social and Environmental Management System

11/2009 — IFC International Finance Corporation, World Bank Group

SEMS 1.0 (2012)
- Corporate Banking
- SME Banking

SEMS 3.0 (2014)
- > scope
- > performance

Natural Capital Declaration

Provides a sustainability framework to understand, integrate, account and report on natural capital direct and indirect dependencies

IFC Performance Standard 6 vs Natural Capital

IFC Performance Standard 6

Performance Standard 6 recognizes that the protection and conservation of biodiversity and ecosystem services and sustainable management of natural resources are fundamental for sustainable development

Natural Capital Declaration

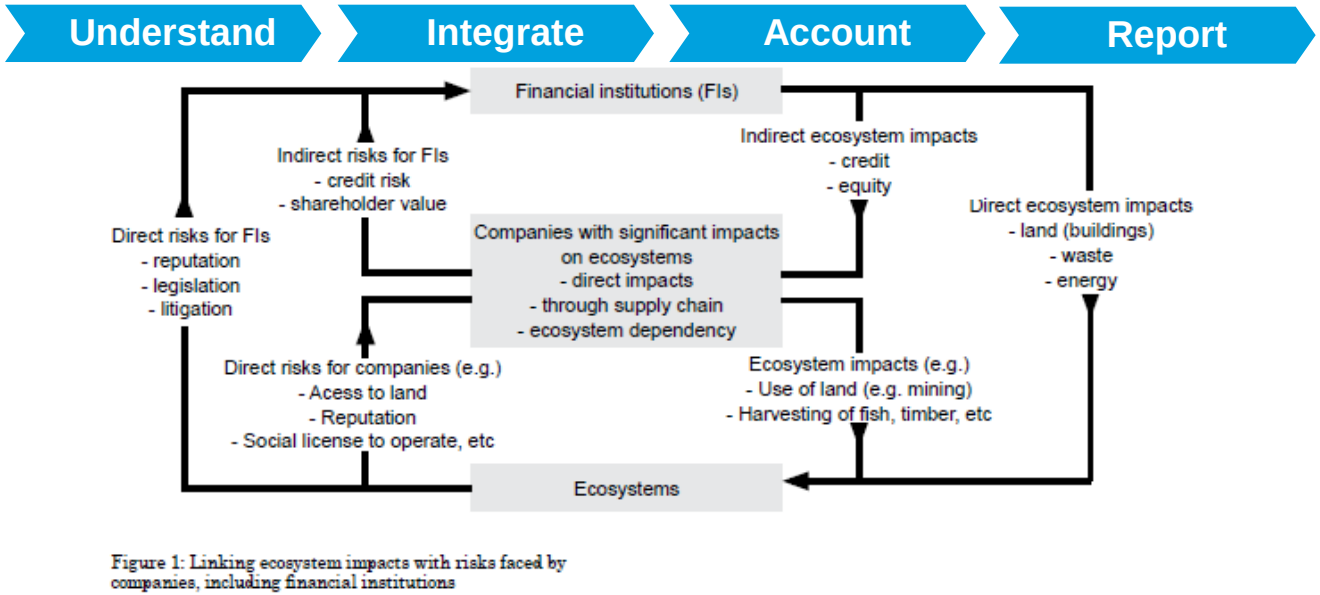
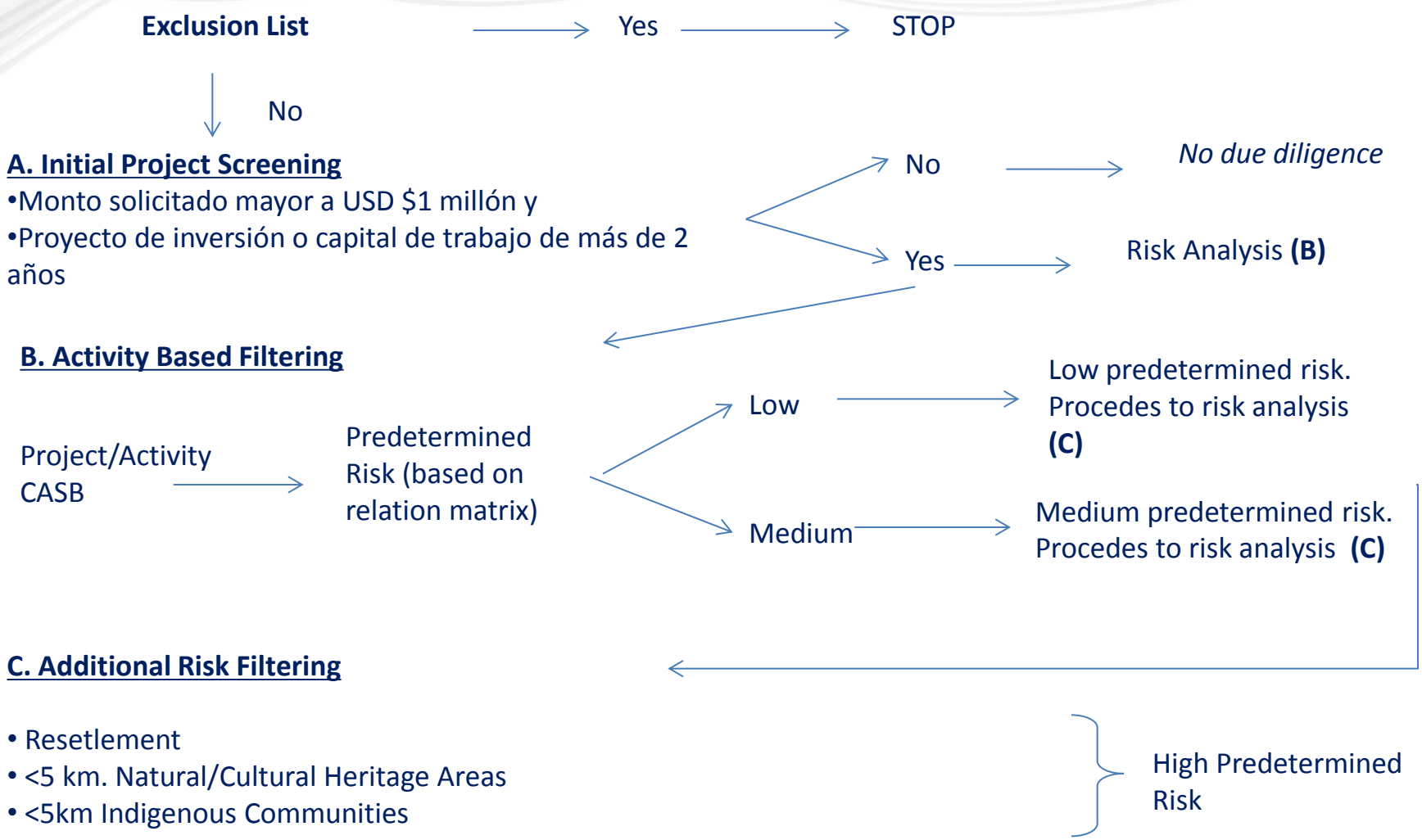


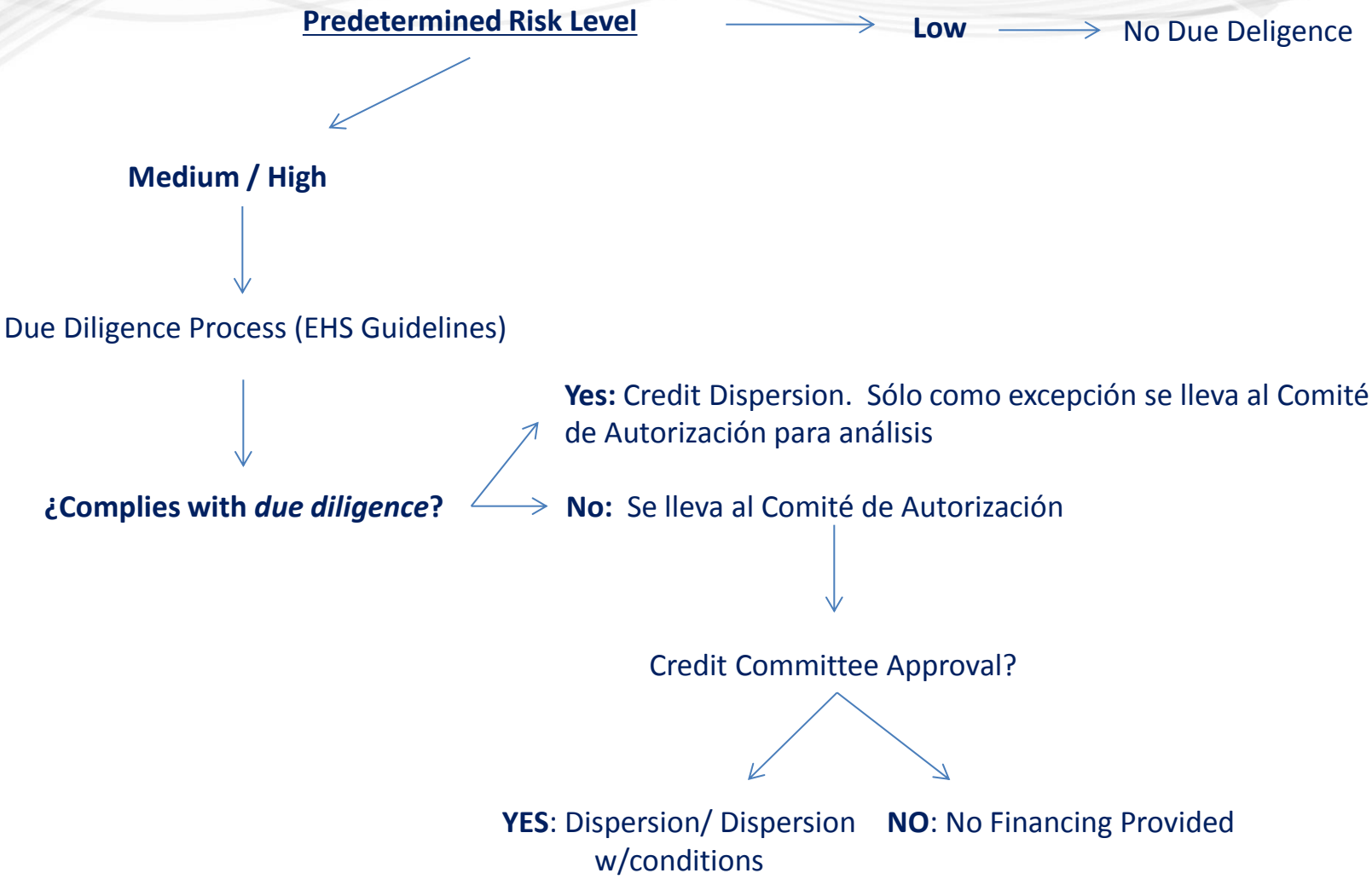
Figure 1: Linking ecosystem impacts with risks faced by companies, including financial institutions

Source: NCD Roadmap

Social and Environmental Management System



Social and Environmental Management System



SEMS: Results

> **2000** Cases analyzed

> **40** Free consulting services provided to our clients

> **300** Credit analysits trainned

13 "Sustainability Champions" + 2 Sustainability Coordinators

Before SEMS: Wind Energy

- Project Finance
- Oaxaca – Windfarm
- Community uprising – Project delayed

After SEMS: Tourist Development

- Project Finance Tourism development
- Holbox – Biodiversity Hotspot
- Landuse change & Community uprising
- SEMARNAT banned project

SEMS: Learnings & Challenges

Culture Change

Learnings

- Resistance to change
- New language / system Implementation
- Educate, educate, educate

Challenges

- Position risk assessment as positive not as negative

Complexity of Sustainability

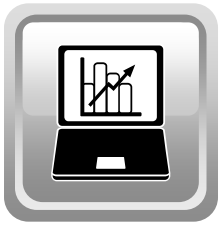
Learnings

- Different opinions – Hard to educate credit analysts
- Legal complexity (national vs international)

Challenges

- Defining precise standards for impact level

User friendly IT



Learnings

- Make IT user friendly not tech savy
- Simple is better
- Work within IT boundaries
- Start simple – Iterate fast

Challenges

- Bank IT's modifications take a lot of time

Sust. Advisory Services

Learnings

- Clients are regularly happy to receive feedback
- Enhance credit officer client relationship

Challenges

- Thorough due diligence without loosing competitiveness (time)
- Lack of information

Natural Capital Declaration – The Road Ahead

Understanding Impacts & Dependencies

WG1: Understanding natural capital risks for financial institutions and embedding them in credit risk assessment

Aims to provide NCD signatories with the business case, approaches, and tools to integrate natural capital into their operations from the investment risk perspective, thereby strengthening financial health of their portfolios

Integrating in Products & Services

WG2 – Pilot project: Risk Policies on Soft Commodities

Develop and test a framework to evaluate financial institutions' policies on managing deforestation and forest degradation risks in soft commodity value chains

Accounting for Natural Capital

WG3 - Embed natural capital in financial accounts

working group 3 work plan to develop accounting framework for financial institutions by 2015; a scoping report on developing a possible global standard by 2020

Disclose & Report on Natural Capital

WG4 - Disclose and report on natural capital

methodology(ies) on natural capital disclosure and (b) reporting from the perspective of financial institutions

Q&A

GRACIAS

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BANORTE

IXE