Introduction to Sustainable ERM

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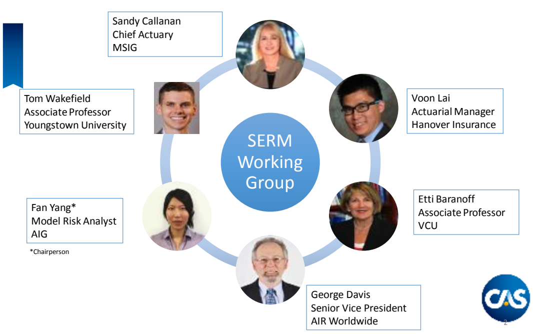

Outline

- Key Terminology
- Global Sustainability Trends from Key Stakeholders
- Industry Best Practice
- Sustainable ERM
- Comparison with Traditional ERM
- Benefits
- Summary and Future Work
- Q&A

Evolution of 'Sustainability'

Origin

- "Meeting the needs of the present generation without compromising the ability of future generations to meet their own needs" (Brundtland Report 1987)
- Urge to re-examine underlying objectives and rationales for economic/financial growth at the expense of resource depletion and environmental degradation

Development and Expansion

- Business opportunities to create resource-efficiency, better products, internal systems and brand value
- Formation of Best Practice in different sectors- from a moral imperative to strategic differentiator
- Launch of Principles of Responsible Investment (2006) and development of Environmental, Social and Governance (ESG) research and analytics in the investment community; become a factor in asset valuation in 2014 Red Book
- One of the 4 meta-trends (Harvard Business Review 2010), Sixth wave of Innovation (Paley 2012)

Towards 2030

- Sustainability = Innovation + Transformation
- New Frontier of "Thriveability": intergenerational human development, the realization of human potential for consciousness, empathy, intellectual capability and creativity while maintaining the integrity of the economy and life-supporting ecosystem

*The concept of Sustainability is not static; it continues to evolve as society changes particularly in response to the urgent need to move towards an environmentally, economically and socially sustainable world.

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Business Sustainability

Definition: An objective of creating value consistent with the long-term preservation and enhancement of financial, human and natural capital

- **Financial Capital**
  - Economic resources generated by financing, operation and investment to continuously support core business
    - Monetary and physical assets as traditionally represented on a balance sheet
    - Monetary assets to cover the economic effects of risk taking activities
    - Property-based tangibles including buildings, equipment, inventory and infrastructure
- **Human Capital**
  - Human resources including people, institutions and relationships on which the health of the organization depends
    - Skills, knowledge, subject matter expertise, and knowledge-based tangibles such as models and analytical assets or other intellectual properties
    - Human relationships, employee engagement, trust, brand value and partnerships (also refer to as social capital)
- **Natural Capital**
  - Natural resources and processes needed by organizations to maintain operations, produce products and deliver services.
    - Natural capital includes both renewable and non-renewable resources, e.g. plants, animals, air, water, soils, minerals

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ESG (Environmental, Social and Governance)

Definition: risk factors evaluated in assessing Sustainability performance of company, accounts and portfolios

Main Application:

- Enterprise Risk Management
  - Comprehensive Capital Management
  - Stakeholder Relationship Management
  - Sustainable Development
- Underwriting
  - ESG data in commercial pricing
  - Creating differentiated value by engaging clients to understand and improve their ESG performance
- Investment
  - Portfolio management using ESG
  - Identify new investment opportunities in the current low interest rate environment

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How Does ESG Impact the Financial Outcome?

Revenue, Operational Expense, Brand Equity,
Cost of Capital, Stock Price, etc.

Core non-financial drivers					
Human capital	Customer relations	Society	Environment	Innovation	Corporate governance
• Employee engagement	• Customer satisfaction	• Public perception • Supply chain management	• Carbon emissions • Waste management	• New product and process development	• Ethical integrity • Processes and procedures
ESG factors					
• Absence rate • Staff turnover • Health & safety • Fair restructuring • Training • Performance management • Equality & diversity • Reputation • Commitment to customer • Talent recruitment & relation	• Customer loyalty • Retention • Reputation • Trust • Price, product, service quality • Competitive positioning	• Opinion former perception • Media coverage • Community investment • Stakeholder dialogue • Legal/regulatory breaches • License to operate • Inclusion • Social capital	• Energy efficiency • Deployment of renewables • Waste reduction • Recycling • Environmental impacts • Environmental breaches • Lifecycle assessment	• Value of patents • Customer perception • Talent recruitment & retention • Training • R&D expenditure	• Ethical code deployment • Board composition • Equality & diversity • Talent development • Audit processes • Reporting & transparency • Reputation • Shareholder interests • Anticorruption policy/practice • Competitiveness

Numerical Evidence: Sustainability As a Differentiator

- More than 100 literatures reviewed by Deutsche Bank:
  - High Sustainability firms have a lower cost of capital in terms of debt and equity
  - 89% of the studies show market-based outperformance of High Sustainability firms and 85% of the studies exhibit accounting-based outperformance
  - ESG factors are statistically correlated with superior risk-adjusted returns
- A study of over 190 papers conducted by the University of Oxford:
  - 88% of the research shows that solid ESG practices result in better operational performance of firms
  - 90% of the studies on the cost of capital show that sound Sustainability standards lower the cost of capital of companies
  - 80% of the studies show that stock price performance of companies is positively influenced by good Sustainability practices

High Sustainability Firm: a company which has adopted a comprehensive set of corporate policies related to the environment, employees, community, products and customers; consequently, has high ESG disclosures and Sustainability reputation.

Reference: Deutsche Bank(2012): Sustainable Investing- Establishing Long-Term Value and Performance
University of Oxford (2014): From Shareholders to Stakeholders

Key Stakeholders

- Shareholders
- Businesses
- Customers/General Public
- Employees
- Universities
- Regulators
- Ratings Agencies

Shareholders

- Growing trend toward ESG investors
- Activist investors driving change in the board room and up the supply chain
- Changes driven by rising social consciousness and awareness of human impact

Businesses

- Transition to a cyclical system that relies less on new materials but seeks to reuse and recycle materials
- Considering the issues of overharvesting, pollution, and natural capital depletion
- Adoption of Sustainability policies and procedures, including construction of green buildings, use of renewable energy sources, and contracts with suppliers emphasizing sustainability

Customers/General Public

- Growing demand for responsible brands
- Increase in purchase of ethical products and locally sourced products - Sustainability as a product differentiator
- Customer expectation on companies to lead and behave ethically
- Beyond consumers, the public has a stake in the sustainability practices of large corporations

Employees

- Employee engagement through Sustainability initiatives
- Commitment to ESG as an important factor in attracting talented employees

Universities

- Sustainability-related programs in business schools
- Increase in Sustainability-related research

Regulators

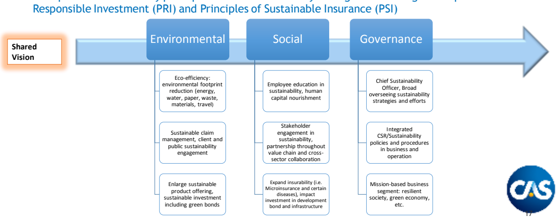
- Regulatory reporting beyond the financial disclosure in many countries and/or industries
- Mandatory disclosure on ESG issues in some regions (e.g. EU, South Africa, Australia, etc.)

Ratings Agencies

- Many sustainability ratings agencies
- Incorporating Sustainability in its credit rating (e.g. Moody's)
- Global Initiative for Sustainability Ratings (GISR) seeks to create a unified ratings standard incorporating sustainability

Industry Leading Sustainability Practice

- Incorporate Sustainability principles in asset and liability management through Principles of Responsible Investment (PRI) and Principles of Sustainable Insurance (PSI)



Best Practice Takeaways

- Proud of Sustainability plans
- Prominent display of Corporate Responsibility (CR) and ESG reports and their implications
- Culture of Sustainability established at all levels of the corporation
- Rewards offered to employees for Sustainability-related decision making
- Expectation for employees to act in accordance with Sustainability-driven values and goals
- Holistic view of ESG - shows improvements over time, and throughout the enterprise

Companies examined: Allianz, Aviva, Co-Operators, Insurance Australia Group, SCOR and Swiss Re

Sustainable ERM

Management of financial, human and natural capital for the purpose of stakeholders' shared value creation to realize sustainable development of the firm and the society it operates in

Stakeholders

- Shareholders and other stakeholders including silent stakeholders (environment and future generations)
- Leadership ethics in SERM ensure no stakeholder is disadvantaged by the actions of others

Values

- Economic value, satisfaction and stewardship
- Corporate value that embraces Sustainability produces more intelligent, sustainable and inclusive growth that captures the true value of human and natural capital

Capital Management

- Comprehensive capital management including financial capital, human capital and natural capital
- Availability, quality and affordability affect long term viability of an organization's business model and capability of long-term value creation

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Comparison with Traditional ERM

- Emphasizes shared value that contributes to sustainable development of the firm and society
- Highlights natural capital, human capital, and financial capital
- Requires data from non-finance related departments – i.e. HR, Facilities, Procurement, IT
- Involves non-monetary based measurements
- Focuses on the long term plans in additional to short term goals
- Not a reinvention of traditional ERM. SERM should be viewed as an extension or enhanced version of traditional ERM – capturing current risks and issues

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Benefits

- Comprehensive Capital Management
- Stakeholder Relationship Management
- Sustainable Development

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Key Benefit I: Comprehensive Capital Management

Quantification of non-financial performance

- Provide consistent, robust and efficient frameworks to combine information from various sources
- Reflect the true wealth of the company through monetized metrics
- Assess long-term viability of business model and strategy through KPI monitoring

Integrated decision-making

- Realize true value of financial capital: release its value through conversion into other forms of capital to support long-term value creation
- Facilitate the creation of stakeholders' well-being

Corporate strategy

- Strategically deploy capitals by concerning availability, quality and affordability
- Manage, maintain and enhance the capital assets

Key Benefit II: Managing Stakeholder Relationship

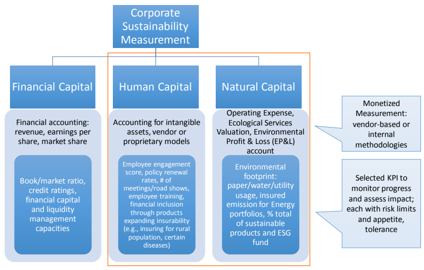
Use capital model in conjunction with stakeholder analysis

- Effective in managing stakeholder relationship and corporate's intangible asset including human capital and social capital
- Improvement on company's transparency, strategy and durability to attract multiple capital resources
- Close, inward look at the company's activities and stakeholders to support better materiality assessment and decision-making for long-term value creation
- Demonstration of the ability of the company to create value over the time
- Creating Trust through transparency and future-fit value proposition
  - Company's value-creating story that endures
  - Implied currency of insurance business
  - Buffer of credibility and sound reputation against potentially damaging events

Key Benefit III: Contribute to Sustainable Development

- Solely generating profits is no longer sufficient on its own to justify a business's survival
- Organization's culture and ethical values are reflected in its use of and effects on the capitals
- The company becomes financially robust and resilient through flourishing individuals
- The business model continues building social resilience and functioning as force for good
- Company of high purpose: harness the power of insurance to create hope and value in the global societies
- Goals of business, sustainability of competitiveness, and goals of humanity, human welfare and well-being, coalesce to deliver resilience, adoptability and creativity for our Common Future

A Simple Conceptual Framework



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On Measurement

- Traditional ERM focuses on managing risks that are measurable, often emphasizing return period and dollar value of risk
- Models for non-financial capitals are now readily available through internal development or from vendors
  - External vendors include Big 4, management consulting firms (Accenture, McKinsey, etc.) and Sustainability consulting firms such as SustainAnalytics, Natural Steps, TruCost and Route2Sustainability
- An *exact* dollar value to the ESG-related risks is not a must
  - Instead of quantitative analysis and evaluation, a *qualitative* analysis can be done
  - Subject matter experts may be consulted to estimate the costs of events arising from ESG risks
    - E.g., Dollar loss in sales due to negative press from unforeseen environmental risks
- Being able to report on ESG metrics or non-financial capitals will allow stakeholders to evaluate the corporation and identify with the brand

"What gets measured, gets managed"
Peter Drucker, Father of Management Theory

"It is wrong to suppose that if you can't measure it, you can't manage it – a costly myth."
W. Edwards Deming ('The New Economics')

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Types of Measures

Goal: To facilitate integrated decision making from a Sustainability perspective

- Monetary
  - Company value
    - Revenue
    - Expenditure on new product development
  - Stakeholder value
    - Human capital model
    - Value-to-Society measurement
- Quantitative
  - Physical units
    - m^3 of water, tons of waste, # of policies, % of new business screened based on Sustainability criteria
  - KPIs
    - Environmental impact (% waste reduction, % recycled), training hours per employee, staff turnover rate, customer satisfaction index, supplier diversity, external Sustainability scores
- Qualitative
  - Ratings
    - Low, Medium, High
  - Descriptive
    - Narrative explanations on company's strategy on vital capitals, quality of management including qualification, succession plans and transparency

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Governance of Sustainability

Integrated Governance: the organizational structure by which companies are directed and controlled, in which Sustainability issues are integrated in a way that ensures value creation for the company and beneficial results

- Board-level oversight
  In absence of stand-alone Sustainability Committee
  - ➢ Corporate Governance Committee
    - Oversee sustainability trends and impact of ESG issues to the business
    - Assist in monitoring and reviewing corporate governance and reputational risk exposure
  - ➢ Audit Committee
    - Oversee ESG materiality assessment
    - Evaluate risk and opportunities of reporting on the sustainability performance of the firm
    - Ensure compliance with new regulations and Sustainability
  - ➢ Risk and Capital Committee
    - Actively monitor latest research and development of Sustainability
    - Over see enterprise ESG risk profile and multiple capital adequacy
  - ➢ Compensation Committee
    - Link sustainability issues material to business to ESG targets
    - Create appropriate short and long-term incentives for stakeholder's shared value creation
- Chief Sustainability Officer reporting to CEO
  - ➢ ESG research team in both underwriting and investment
  - ➢ Report on the company's environmental footprint and social impact from products & services, employment practice and operation

Reference: UNEP (2016): Integrated Governance

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Why Should Employees Embrace SERM?

- Executives and Board
  Formulate corporate strategies that create economic, environmental and social value
- CRO
  Have a holistic framework to manage enterprise risks especially those that are traditionally considered to be 'un-quantifiable' or soft risk in nature
- Managers
  Increase workforce productivity and satisfaction; foster, nourish and protect human capital/ intellectual capital
  Maximize value creation through effective resource allocation and staffing decisions
- Risk Professionals
  Better understand risk using new data (ESG data/big data) and tools for pricing, reserving, investing and risk management
- General Employees
  Learn about the characteristics and standards for future-fit business
  Cultivate systems thinking

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Why Should We Embrace SERM?

Where traditional ERM falls short:

- Engineered to work backwards from traditional (short-term) financial performance metrics
  - ➢ Lack of emphasis on critical ESG margins
  - ➢ Underestimates financial impact of ESG performance
- Less effective in managing stakeholder relationship and corporate's intangible asset including human capital and social capital
- Underutilization of ESG data and information for commercial purposes
  - ➢ Lack of consistent and robust, yet efficient, frameworks to combine information from various sources (financial vs. non-financial/extra-financial, hard data vs. soft data, tangible asset vs. intangible asset)
  - ➢ Ignoring how to anchor insurers' operation in the economy and the society

Benefits of SERM:

- Manages cash flow to ensure an adequate pipeline of capital to meet challenges and to explore strategic growth opportunities and operational efficiency
- Enables holistic management of all vital capitals and stakeholder relationships of the organization in different time horizons through ESG intelligence
- Pays attention to the wider contextual factors including stability and health of economic and environmental systems, evolving values and expectations of the society

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Future Work

- Enhance the conceptual framework
- Develop ESG matrices to be adopted in SERM framework
- Create a comprehensive capital model for holistic enterprise risk and value management

Questions and Discussion