Lenses and clocks

Financial stability and systemic risk
Financial Stability and Systemic Risk: Lenses and Clocks

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For a more stable and resilient financial system, the paper argues metaphorically that all public and private actors involved in the investment and financial intermediation chains will benefit from the use of better quality and wider “lenses” that give greater depth, breadth and granularity to our vision and understanding of a wider range of risks. Also, those same markets’ actors would benefit greatly by employing “clocks” that heighten appreciation of the temporal nature of risk\(^1\) by neither over-emphasizing those short-term and seemingly more easily quantifiable risks nor under-emphasizing long-term, less easily quantifiable, risks.

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Introduction

“If we experience a 50 percent draw down on our investments every few years then we can simply forget development, sustainable or otherwise….”

—Head of a large European national pension fund, referring to the systemic impacts of the financial crisis, March 2010

This paper highlights how evolving thinking drawn from sustainable finance and responsible investment can inform the financial stability debate, and vice versa. The paper urges financial policy-makers to consider this new thinking as they seek to formulate and, in coming years, refine policies that deliver a more stable and resilient financial system. The importance of a deeper understanding of broader systemic risk issues, improved governance and clearer fiduciary responsibility, all central to both the overhaul of our financial systems and to the principles and practices of sustainable finance and investment, is a focus of the paper. Essentially, the paper seeks to foster ongoing and inform discussions among financial policy-makers and those financial services and investment institutions that are working with the United Nations to promote sustainable finance and investment. This paper is a working document and will evolve throughout the course of wide-ranging global consultations with the banking, insurance, investment and capital market communities in 2010–2011.²

The paper is a collaborative effort between the United Nations Environment Programme Finance Initiative (UNEP FI) partnership and the International Institute for Sustainable Development (IISD).³ After briefly detailing the context of the financial and economic crisis of 2007–2010 and the ongoing response to that crisis, the paper highlights six areas related to the re-engineering of our financial system and outlines the relevance of sustainable finance and investment thinking to these areas. The six areas are:

1. Dark Pools and the Shadow Side: Stability and Over-the-Counter Markets;
2. Ownership That Counts: Institutional Investors and Accountability;
3. Listing for Stability: Stock Exchanges and Listing Requirements;
4. Banking Risk for the Long Term: Systemic Risk and the Basel Committee;
5. Rating Right: The Role of Rating Agencies within the Financial System; and
6. Insuring the Future: Stability and Solvency II.

² The final paper will be presented at the forthcoming UNEP FI Global Roundtable, scheduled to convene in Washington, D.C., USA, from 18–20 October 2011.
³ The International Institute for Sustainable Development (see www.iisd.org) is a Canadian policy research institute dedicated to sustainable development.
The paper then poses a series of questions that will help focus future discussions on how financial stability and sustainable finance thinking can be mutually supportive. A set of recommendations for follow-up action is presented in the concluding section.

A series of appendices to the paper map the worldwide regulatory reforms of the financial system that are underway. Clearly, this is an evolving process and these tables will be updated over time. Also, the appendices provide a series of snapshots and lessons learned for those economies that have weathered the crisis most effectively. The paper is not presented as a comprehensive analysis of the causes and impacts of the financial crisis; those issues are covered in great detail in a broad range of current publications.

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**Box 1: The basics—overhauling finance.**

This paper, in part, seeks to play an educational role for those not intimately involved in the high level policy-making geared to financial stability and efforts to make the financial system more resilient after the crash of 2007–2008 and the ensuing economic downturn. The paper refers to a number of the key groups and institutions working to re-engineer the international structure of the finance sector. Understanding the roles of these different groups and how they interrelate is an important step in understanding ongoing efforts to create a more effective financial system. Key groups include:

- **The Group of 20 (G-20):** A group of leading countries that plays an increasing role to enhance coordination of macroeconomic policies and to ensure political support for financial regulatory reform;
- **The Financial Stability Board (FSB):** Created by the G-20 in 2009 to replace the smaller Financial Stability Forum (FSF), FSB is part of the Bank for International Settlements (BIS). The FSB is mandated by the G-20 to coordinate and monitor progress in strengthening financial regulation. The FSB coordinates the work of national authorities and standard setters to ensure international consistency. The board is made up of senior representatives of national financial authorities (central banks, regulatory and supervisory authorities and ministries of finance), international financial institutions (e.g., the International Monetary Fund, the World Bank) and standard setting bodies such as the European Commission (EC) and the Organisation for Economic Co-operation and Development (OECD);
- **The Basel Committee on Banking Supervision (BCBS):** Also part of BIS, the BCBS internationally coordinates the standard setting of banking supervisory matters. For example, BCBS sets international agreements on minimum capital and liquidity requirements for banks. The Committee’s work on addressing systemic risk is part of a wider effort of the FSB to address the risk of systemically important institutions; and
- **The International Accounting Standards Board:** This Board has set up the Financial Crisis Advisory Group (FCAG), which considers how improvements in financial reporting could help enhance investor confidence in financial markets. The FCAG work feeds into the FSB.

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4 The Bank for International Settlements (BIS) was established on 17 May 1930 and is the world’s oldest international financial organization. The BIS fosters international monetary and financial cooperation and serves as a repository for central banks. See http://www.bis.org/about/index.htm.
Executive Summary

In the period since August 2007, when the first rumblings of the coming global financial crisis were heard on Main Street, the very model of modern financial services has been questioned. Financial policy-makers have called for “radically changed regulations and supervisory approaches”\(^5\) and one of the world’s most senior bankers has asserted that certain complex financial products were “of no real use to humanity.”\(^6\) In the late spring of 2010 the sector was warned that post crisis, “private players will be held accountable to new and stricter standards of economic integrity and prudent management.”\(^7\) There have been numerous calls for a root and branch reassessment of the way in which this powerful sector—more globalized than any other—contributes to economies and society.

After 20 months of almost continual analysis of the causes of the financial crisis, it is clear that misaligned incentives, conflicts of interest, a predominance of short-termism, and failures of both accountability and responsibility and—in some cases—fiduciary duty have occurred at many different points along the investment chain and throughout the processes of financial intermediation. Across the various market reform processes, the themes of transparency, accountability, responsibility, improved governance, legitimacy, financial inclusion and equity are repeated internationally and in different jurisdictions. Ideas presented for the overhaul of our financial markets cover both institutional reform (fixing the current system) and broader functional reform (re-engineering finance to serve society and economies more effectively). Some observers\(^8\) have argued that a change in our regulatory philosophy from “horizontal” to “vertical” regulation is needed to strengthen the whole chain that governs the financial system. Such a change, they contend, would yield a system appropriate for the needs of interconnected financial markets in an age of globalization. Others stress the critical need for greater competition and diversity across the financial markets, notably with an increased emphasis on institutions with clear cooperative, mutual, social and environmental missions to balance the dominance of “too big to fail” financial institutions. The concept of Long Finance,\(^9\) which poses the question “When would we know our financial system is working?” is also gathering support.

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\(^5\) Speech by Lord Adair Turner, Chairman, Financial Services Authority, at the City Banquet, the Mansion House, London, 22 September 2009.

\(^6\) Speech by Sir Stephen Green, Chairman, HSBC, and Chairman, British Banking Association, at the Banking in the Process of Change Conference, Frankfurt, 9 September 2009.

\(^7\) Keynote speech by Jean-Claude Trichet, President, European Central Bank, at the 9th Munich Economic Summit, 29 April 2010.


Two major reports released in the spring of 2010 provide a significant insight into the all-encompassing nature of the failures across both the public and private economic and supervisory dimensions in two countries marked by distinct differences in scale and tradition. The Valukas Report from the United States cast a spotlight on the September 2008 failure of a private investment banking institution, Lehman Brothers Inc., at the same time raising questions over a regulatory and supervisory context that enabled the prospect of that failure to arise. The Icelandic Truth Commission described a process leading to the near sovereign financial collapse of that country, in which reckless behaviour by three private banking institutions played a major part.

An intense period of analysis by many different bodies worldwide has highlighted the fact that, while many actors along the investment and financial intermediation chains were acting rationally and legally in their own self interest, the “collision of all these self interests brought the system to its knees.” Questions over the ethical, governance and legal aspects of decisions taken by individual executives and institutions continue to be raised.

There also has been a widespread recognition of the systemic nature of the failure that saw a global financial crisis turn into a severe economic downturn for many major economies. The role and effectiveness of lawmakers, the financial policy community and supervisory bodies and regulators, both internationally and nationally and pre- and post-crisis, have come under close examination. The President of the European Central Bank acknowledged in late April 2010 that “the vast expansion of the financial sector would not have been possible without supportive macroeconomic conditions and inadequate prudential regulation.”

Various commentators, examining many different aspects of the financial system, have repeatedly called for:

- A thorough rethink of the overall governance of our financial system and how the architecture of the system interrelates;
- Finance to revisit its basic role in order to more effectively serve its primary social and economic functions; and
- A new vision where a re-engineered financial system builds lasting economic, social and environmental value.

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10 The 2,200-page Valukas Report, prepared by Chicago-based lawyer Anton Valukas, explores the collapse of Lehman Brothers Inc.; the Icelandic Truth Commission report catalogues the drivers of the country’s near sovereign default.
12 Trichet, 29 April 2010.
This paper contends that many of the ideas, principles and practices developing within sustainable finance and responsible investment directly address these needs and will be beneficial to our collective efforts to remake a broken system.

Importantly, a re-engineered financial system needs to be one capable of delivering the new, low-carbon, resource-efficient and inclusive markets and economies that an increasing number of governments and businesses have committed to and that, in turn, are recognized as the type of structures upon which future economic, social and environmental stability can be based.\(^\text{13}\)

\(^{13}\) Steps to create a financial system capable of delivering a “green economy” are covered in detail in the Finance chapter of the forthcoming Green Economy Report, United Nations Environment Programme, due in Q4 2010.
Part 1
Finance under the Lens

Following the crash of 2007–2008, the modern financial system has undergone a molecular forensic examination that continues today. For politicians, policy-makers, legislators and financiers, the question remains: “How do we create a stable, resilient and robust financial system that can deliver sustained and balanced economic growth?”

Resuscitation, Analysis, Regulation and Litigation

Since the weekend of 20–21 September 2008, a few days after the Lehman Brothers Inc.\textsuperscript{14} failure, financial policy-makers around the world have focused collectively on preventing a collapse of the global financial system. After the initial “financial doomsday fears” of 2008 and early 2009 subsided, finance ministers, central bank governors and the Bretton Woods Institutions,\textsuperscript{15} amongst others, shifted their attention from the emergency resuscitation of a failing financial system to a focus on how to recatalyze economic growth and reconfigure the system to counter the likelihood of and/or ameliorate the severity of the impacts of such a system threatening events in the future. This complex process, marked by contentious policy debates, continues today at national, regional and international levels with a diverse range of policy, legislative and regulatory options on the table (see Appendix 6) as governments and authorities seek to balance their domestic economic, financial and political needs with the realities of an unstable global financial marketplace. It should be noted, also, that the various rounds of international discussions are carried on against a background of intermittent “flareups” in the aftermath of the financial crisis, such as the sovereign debt default fears that have caused such deep concern in the euro zone area since May 2010 and that have contributed to a renewed bout of uncertainty, even fear, amongst the global investment community.

The all-encompassing nature of these policy discussions and negotiations covers a broad spectrum of needs, ranging from calls “to converge on a common solution”\textsuperscript{16} for global financial challenges, to efforts to address capital requirements, accounting conventions and incentive structures within finance. The globe’s leading financial policy-makers are battling to understand and to coordinate a latticework world of intertwined policy discussions, international, regional and national negotiations,

\textsuperscript{14} For a good summary of the Lehman Brothers Inc. collapse, see http://www.investopedia.com/articles/economics/09/lehman-brothers-collapse.asp.

\textsuperscript{15} The Bretton Woods Institutions include the International Monetary Fund (IMF) and the World Bank Group, which both became operational in 1945.

and immensely complex technical problem solving around different facets of finance and investment.

Central to these discussions have been the questions of how our increasingly interconnected financial systems work and what degree of control and preventive action is required from public lawmakers and agencies to head off severe events that are happening with greater frequency. The question and desirability of how the financial services and investment communities might reform and regulate themselves is also in the spotlight. The highly diverse sector operates in a complex environment of evolving international policy norms that are not aligned with fragmented policy, legislation and regulation at the regional and national level. Financial engineering and aggressive product innovation, often geared to short-term opportunities, have meant that important parts of the industry were able to forge hidden and unimaginable levels of systemic risk under a belief that the processes ensured diversification of risk across uncorrelated asset classes. The crash of 2008–2009 proved this simply not to be the case and confirmed the dangers of the largely unrecognized systemic risk inherent to the “originate and distribute” model of financial engineering by banks (as distinct from the traditional “originate and hold” approach to banking).

Understandably, the financial policy community has directed its efforts, firstly, to keep the financial system afloat and to protect economic growth, secondly, to understand and to respond to those systemic risks that appear to have built up within the liberalizing global financial markets of the past twenty years, and thirdly, to correct the governance gaps that appear to have contributed to the financial meltdown.

The G-20, as well as a host of contributing international bodies, are central to these discussions as the international community sees two co-hosted G-20 Summits in Canada and then South Korea during 2010. At the same time, the international accounting community, notably the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB), were asked by the G-20 in September 2009 to come up with a “high quality global accounting standard—a single way of measuring all the world’s companies.” It appears, however, that international efforts to bring about convergence around one standard, the International Financial Reporting Standards, have faltered and the accounting community has to a large degree

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17 The G-20 was created in 1999 after the 1997 Asian Financial Crisis, to explore how the world’s most advanced economies and major emerging markets could work together to prevent financial instability. For more on the G-20, see http://www.g20.org.
18 The FSB was established to address vulnerabilities and to develop and implement strong regulatory, supervisory and other policies in the interest of financial stability. For more on FSB, see http://www.financialstabilityboard.org.
19 The Basel Committee on Banking Supervision provides a forum for regular cooperation on banking supervisory matters; see http://www.bis.org/bcbs.
accepted that, at this stage, an integrated global accounting system is beyond its reach.\textsuperscript{21} Agreement over the valuation and pricing of banking assets, notably the complex financial products such as derivatives that sat at the heart of the initial sub-prime crisis in the United States, as well as loans and loan-like instruments,\textsuperscript{22} appear to be, once again, at the epicentre of the schism across the accounting world. Instead, the leaders of the global accounting community hope to achieve, at a minimum, better coordination across accounting principles and practices that underpin our systems in an era of unremitting financial globalization.

Essentially, all of these discussions and the subsequent work to forge effective policy action, whether at the global, regional or national level, seek to understand how governance of our financial and market systems, as well as the governance of individual institutions and the agencies that have oversight authority for them, have failed and can be improved in order to safeguard the overall system that underpins global economic and social development.

For the global financial policy-making and accounting communities, given the fundamental and wide-ranging nature of possible changes post the crisis, a quote drawn from the world of politics captures the current period: “The Kaleidoscope has been shaken. The pieces are in flux. Soon they will settle again. Before they do, let us re-order this world around us.”\textsuperscript{23}

### Transition Point

The spring of 2010 marked a significant transition point in the various phases of the 2007–2010 financial crisis and global economic downturn. Over the course of a few weeks, the world saw a shift from the assessment and reporting phase characterized by initiatives to analyze why a system threatening crisis of such severity took place, this period itself following the frantic few months in late 2008 to early 2009 when policy-makers sought to save and then resuscitate a failing financial system, to a period when we will see the regulatory overhaul executed and prospective litigation against financial service institutions by governments and investors possibly gathering pace. Naturally, litigation against the finance and investment community was a facet from the earliest stages of the crisis and the analysis and discussion of the “why and how of the crisis” will continue for many years to come, but the period March–June 2010 will be viewed in the future as a transition point from “analysis to regulatory roll out and litigation.” During the spring of 2010, two significant reports\textsuperscript{24} were released: one exploring the September 2008 collapse of the Wall Street investment bank,
Lehman Brothers Inc., and the second cataloguing the reasons for the 2008 near sovereign default by Iceland and the collapse of its three major banks. In many ways, the release of these two reports marked an end point to the early assessment and reporting phase of the crisis. And then the transition:

- On 16 April, the US Securities and Exchange Commission (SEC) “charged Goldman, Sachs & Co. and one of its vice presidents for defrauding investors by misstating and omitting key facts about a financial product tied to subprime mortgages as the US housing market was beginning to falter.”

- Goldman, Sachs & Co. has strenuously denied the allegations, saying they are “completely unfounded in law and fact.”

- As April 2010 slipped into May, it became clear that regulators in the United States, in Europe, and in other countries worldwide were ready to unveil a raft of new regulations in 2010 as part of the post-crisis overhaul. The passage on 20 May, in the US Senate, of the landmark Restoring American Financial Stability Act was a significant case in point, as is the arrival in the second half of 2010 of a range of financial directives from EU regulators.

As outlined earlier, the backdrop to the transition is the ongoing and complex negotiations to forge new systems of financial services oversight and supervision, with the objective of ensuring financial system stability. At the same time, policy-makers are challenged by the need to reinvent a system that enables, rather than stifles, sustainable economic growth at a time when the public finances of many major economies are under extreme stress. Ideological, political and economic interests covering the entire spectrum of public and private actors across the globe are to the fore in the policy debates and international negotiations that will shape the new and overhauled system. The initiatives underway are manifold and, ultimately, their goal is to engineer at national, regional and global levels—financial systems where

- systemic risk is safely contained through identification, analysis, management and monitoring;
- there is early warning of systemic threats;
- sustainable financial and economic development is supported by productive financial innovation; and
- options for institutions and individuals to game the system are reduced.

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27 Restoring American Financial Stability Act, as amended. S. 3217 is a comprehensive financial regulatory reform bill that includes provisions to consolidate existing consumer protection authorities into a new Consumer Financial Protection Bureau, establish a council to monitor and address systemic risk, implement a resolution authority to end the problem of firms being considered “too big to fail,” and regulate derivatives markets. Source: http://www.lexology.com/library.
A fundamental question for this paper is, how are the issues of high finance, financial sector policy-making and the ongoing forensic analysis of a calamitous financial meltdown and economic recession associated with the sustainable finance and responsible investment agenda?

**The Link: Stability, Resilience and Sustainability**

The April 2010 Communiqué from G-20 Finance Ministers is a good starting point, because incorporated within the statement is “The G-20 Framework for Strong, Sustainable and Balanced Growth.” As part of the framework, we are told that “[t]he objectives of strong, sustainable and balanced growth are closely related and need to be pursued in a way that is mutually reinforcing.” Supporting this objective, the framework becomes more explicit, as shown below.

Sustainable growth should be:

a. In line with underlying potential growth over the medium term, thereby providing a firm basis for long-term growth;

b. Based on sustainable public finances and price and financial stability;

c. Resilient to economic and financial shocks;

d. Determined primarily by competitive market forces; and

e. Consistent with social and environmental policy goals.

The G-20 statement is a strong anchor point for the fact that the emergent thinking and practices of sustainable finance and investment are inextricably connected with the high level financial policy-making that seeks a more stable and resilient global financial and economic system. This paper seeks to deepen that argument and identify fundamental questions to advise a forward-looking conversation between financial policy-makers and those financial institutions working with the United Nations.

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Part 2
The Ticking Clock of Long-Term Systemic Risk

Somewhat distanced from the immediate remit of the current financial policy-makers’ technical discussions, another process has been building momentum in recent years, one which covers efforts to understand how a broader range of systemic risks may, in time, also jeopardize economic, social and financial stability to varying degrees. Resource scarcity, climate change, threats to our biodiversity and ecosystems, the demographics of aging populations, and the impact of chronic diseases are prominent examples of a growing list of risks that, either in isolation or as a result of interconnection, may threaten the stability of economic and financial systems. In early 2010 the World Economic Forum suggested that “the biggest risks facing the world today may be from slow failures or creeping risks.”

Work undertaken since 2003–2004 exploring the fiduciary implications as well as the financial materiality of a range of potential risks (such as climate change with systemic implications) is building a case that promotes the need for greater engagement by investors and financial intermediaries along the investment chain in order to understand the nature of these risks.

Notably, developments related to the legal (see Box 2: The emergence of the new fiduciary) responsibilities of fiduciaries, as well as the legal responsibilities between different actors in investment processes, has focused attention on how emerging risks, including governance issues, should be accounted for within the dynamics of investment policy-making and decision-making. Some legal observers recognize the emergence of a new “soft law” framework that is already influencing decisions by large asset owners (pension funds, sovereign wealth funds, insurance reserves) in the marketplace and which, in time, may become firmer in nature as different capital market and legal jurisdictions address the issues of legal liability raised by reports such as Freshfields and Fiduciary II. In the first decade of the 21st century there has been a flowering of

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31 Fiduciary: An individual, corporation, or association holding assets for another party, often with the legal authority and duty to make decisions regarding financial matters on behalf of the other party. See www.investorwords.com/1932/fiduciary.html.
33 Ibid.
34 UNEP FI, 2009, “Fiduciary responsibility: Legal and practical aspects of integrating environmental, social and governance issues into institutional investment,” July.
initiatives\textsuperscript{35} drawing long-term institutional investors together to press the case for a deeper understanding of systemic risk issues and for a more effective integration of these risks along the entire investment chain. The term Private Environmental Governance is being used to describe such developments, and the Universal Owner Theory\textsuperscript{36} provides an academic context for the evolving discussion around the roles and responsibilities of institutional investors in dealing with long-term systemic risk.

**Governance of Markets and Institutions**

It is clear that governance of both markets and individual institutions is central to many of the discussions around the stability of the financial system, as well as to the oversight of financial institutions and markets. The events around what has become one of the most infamous episodes in financial history bear testimony to a failure of governance at many different macro and micro levels and it is clear that significant governance failures at the system-wide and corporate levels of our financial markets were major contributors to the most severe economic downturn in three generations. However, the nature of the linkages among financial system stability and environmental and social risk issues, many longer-term in nature, are not so apparent or quantifiable when viewed over the short term and this is the reason why so many actors along the investment chain simply discount these considerations when dealing in the market with a short-term perspective. Certainly, when taken from the perspective of the World Economic Forum’s “slow failures or creeping risks,”\textsuperscript{37} the relevance of these environmental and social risks to financial stability, either in isolation or through interconnection, become apparent. The overwhelming predominance of short-termism in the markets, compounded by a system ill suited to integrate and account for externalities, simply removes many of the broader systemic risks from the financing and investment equations driven by existing market norms.

The paper acknowledges that a degree of volatility within the financial system, across capital markets and amongst financial institutions is a natural part of the free-market capitalist system associated with business and economic cycles, including asset bubbles and their aftermaths. What the paper contends, however, is that:

\textsuperscript{35} Prominent such initiatives include the Principles for Responsible Investment (www.unpri.org); the P8 (http://www.princeofwales.gov.uk); the Investor Network on Climate Change (http://www.incr.com), and the Carbon Disclosure Project (https://www.cdproject.net).


• Firstly, the intensity, depth, increasing frequency and far-reaching nature of financial system failures in a globalized marketplace is not an inherent part of properly functioning, well supervised markets with the ability to adjust to and internalize developments driven by the innovation inherent to modern financial markets.

• Secondly, a properly functioning and well supervised free market should also have the ability to identify, assess, account for and price systemic risks—the so-called “slow failures or creeping risks” that are longer-term in nature. As such, and as part of a transition to a more stable and resilient financial system, the balance between short-term quantifiable risks for which our analytical, rating, capital market and accounting mechanisms are purportedly set up and those mid- to long-term risks, systemic in nature and otherwise, for which our systems are not effectively configured, needs to be addressed.

• Thirdly, an important “fundamental test” for long-term financial market stability and resilience is the ability of the financial system to deliver a low-carbon, resource-efficient economy that also acts to reduce both poverty and financial exclusion.

38 For example, Mexican “Peso” Crisis 1994; the Asian Crisis 1997; the Russian “Ruble” Crisis and failure of the US hedge fund Long-term Capital Management 1998; the dot.com “Boom & Bust” 1997-2000; the corporate governance failures of 2001-2002 (e.g. Enron, Worldcom, Arthur Andersen LLP) and the financial crash of 2007-2010.

In October 2005 a landmark legal interpretation covering the nine major capital market jurisdictions was published. This legal opinion opened up a new potential for the world’s largest institutional investors to consider a broader range of risk issues in their investment processes. In fact, the legal interpretation argued that for the law as it stands in most major capital market jurisdictions, the appropriate consideration of a fuller range of environmental, social and governance (ESG) issues—from both risk and rewards standpoints—was an obligation for many and mandated by law for some. Traditionally, the institutional investment community shied away from considerations of what were often termed “non-traditional, extra financial or non-financial” risks, citing the rationale of fiduciary duty and arguing that any form of special provision or consideration of special interest issues might compromise their duties to ultimate beneficiaries such as pensioners or a country’s citizens in the case of Sovereign Wealth Funds. This legal interpretation, which became known as the Freshfields Report within the investment industry, greatly strengthened the case around the need for investors to fully integrate material risk considerations in all aspects of their investment processes. In short, this work moved forward the discussion on the need for key market actors to integrate, account for and price the risks associated with a broader range of externalities than had previously been the case in investment practice. The Freshfields legal interpretation was followed in July 2009 by the Fiduciary II report that built on the initial interpretation and argued that investment advisors who do not proactively raise ESG issues for their clients open themselves to potential legal liabilities. This evolving process that sees a broader range of risk issues being embedded in the thinking around fiduciary responsibility and legal considerations goes to the very heart of many investment policy-making and decision-making processes. In parallel to the legal work exploring fiduciary duty that was underway, from 2003 a group of asset managers, collectively representing US$1.7 trillion in assets under management, asked whether the “financial materiality” of a broader range of risk carrying issues should be reconsidered. What was, essentially, a simple question then drove a six-year-long process that unfolded between 2003 and October 2009 and that yielded three major reports currently transforming thinking within important parts of the mainstream investment world. In the “Materiality Series,” mainstream financial analysts explored the relevance of a range of risk issues, systemic and otherwise, such as climate change, occupational and public health, human labour and political rights, and both corporate trust and governance, across a range of commercial and industrial sectors (including aviation, auto industry, aerospace and defence, chemicals, food and beverage, forest products, media, non-life insurance, pharmaceuticals, property, and utilities). The third and, to date, final report in the series focused on climate change and was published just two months ahead of the December 2009 United Nations climate change summit in Copenhagen. The report mainly takes the form of a review of key financial analyst research on climate change. What the Materiality Series was so effective in doing was to make a clear, mainstream financial case that a broader range of risk factors have financial relevance and are as useful in constructing a synthesis of management quality as strictly financial factors. Both the fiduciary legal work and then the Materiality Series were fundamental in laying the groundwork for the development of the Principles for Responsible Investment (Appendix 2), now backed by more than 750 institutional investors representing US$21 trillion in assets.

Box 2: The emergence of the new fiduciary

In October 2005 a landmark legal interpretation covering the nine major capital market jurisdictions was published. This legal opinion opened up a new potential for the world’s largest institutional investors to consider a broader range of risk issues in their investment processes. In fact, the legal interpretation argued that for the law as it stands in most major capital market jurisdictions, the appropriate consideration of a fuller range of environmental, social and governance (ESG) issues—from both risk and rewards standpoints—was an obligation for many and mandated by law for some. Traditionally, the institutional investment community shied away from considerations of what were often termed “non-traditional, extra financial or non-financial” risks, citing the rationale of fiduciary duty and arguing that any form of special provision or consideration of special interest issues might compromise their duties to ultimate beneficiaries such as pensioners or a country’s citizens in the case of Sovereign Wealth Funds. This legal interpretation, which became known as the Freshfields Report within the investment industry, greatly strengthened the case around the need for investors to fully integrate material risk considerations in all aspects of their investment processes. In short, this work moved forward the discussion on the need for key market actors to integrate, account for and price the risks associated with a broader range of externalities than had previously been the case in investment practice. The Freshfields legal interpretation was followed in July 2009 by the Fiduciary II report that built on the initial interpretation and argued that investment advisors who do not proactively raise ESG issues for their clients open themselves to potential legal liabilities. This evolving process that sees a broader range of risk issues being embedded in the thinking around fiduciary responsibility and legal considerations goes to the very heart of many investment policy-making and decision-making processes. In parallel to the legal work exploring fiduciary duty that was underway, from 2003 a group of asset managers, collectively representing US$1.7 trillion in assets under management, asked whether the “financial materiality” of a broader range of risk carrying issues should be reconsidered. What was, essentially, a simple question then drove a six-year-long process that unfolded between 2003 and October 2009 and that yielded three major reports currently transforming thinking within important parts of the mainstream investment world. In the “Materiality Series,” mainstream financial analysts explored the relevance of a range of risk issues, systemic and otherwise, such as climate change, occupational and public health, human labour and political rights, and both corporate trust and governance, across a range of commercial and industrial sectors (including aviation, auto industry, aerospace and defence, chemicals, food and beverage, forest products, media, non-life insurance, pharmaceuticals, property, and utilities). The third and, to date, final report in the series focused on climate change and was published just two months ahead of the December 2009 United Nations climate change summit in Copenhagen. The report mainly takes the form of a review of key financial analyst research on climate change. What the Materiality Series was so effective in doing was to make a clear, mainstream financial case that a broader range of risk factors have financial relevance and are as useful in constructing a synthesis of management quality as strictly financial factors. Both the fiduciary legal work and then the Materiality Series were fundamental in laying the groundwork for the development of the Principles for Responsible Investment (Appendix 2), now backed by more than 750 institutional investors representing US$21 trillion in assets.

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40 Box 2 draws from a report prepared by Paul Clements-Hunt, Head, UNEP FI, for a presentation at the December 2008 Symposium sponsored by the German development bank, KfW.
41 UNEP FI/Freshfields Bruckhaus Deringer, 2005, “A legal framework.”
42 UNEP FI, 2009, “Fiduciary responsibility.”
43 UNEP FI Asset Management working group (AMwg).
44 The “Materiality Series” comprises three reports published by the UNEP FI Asset Management working group (Materiality I: “The materiality of social, environmental and governance issues to equity pricing,” June 2004; Materiality II: “Show me the money: Linking ESG issues to corporate value,” July 2006; Materiality III: “The materiality of climate change: How finance copes with the ticking clock,” October 2009).
45 Principles for Responsible Investment (PRI) (see www.unpri.org). The PRI is an investor collaboration formed as a result of a joint UNEP FI/UN Global Compact initiative, 2003-2006.
Part 3
Remaking the Markets

When approached from a systemic or high level policy standpoint, the linkage between financial stability and issues of broader systemic risk, fiduciary legal concerns and the governance of systems and institutions is clear. It would appear intuitive that stability in a complex global financial system requires a sound understanding of both short- and long-term risks, demands fiduciaries take full account of such risks when managing capital held in trust, and needs to be underpinned by effective macro and micro governance structures to keep systems and institutions in balance. However, when one tries to draw a direct line of sight between sustainable finance and investment approaches with the complex realities of macro and micro prudential regulation, the arcane technical specificities of banking capital requirements, and efforts to prevent instantaneous electronic trading on opaque platforms from destabilizing the financial system, the task becomes immeasurably more complicated.

For this reason, the paper limits its exploration of the relevance of the evolving sustainable finance and investment thinking to six areas of the financial markets that are relevant to the overhaul of the financial system.

Again, this does not pretend to be an exhaustive analysis but rather a reflection of how new thinking and approaches can, in time, feed into financial policy discussions and work to bolster the stability and resilience of the system. As mentioned previously, the six areas the paper will explore include:

1. Dark Pools and the Shadow Side: Stability and Over-the-Counter Markets;
2. Ownership That Counts: Institutional Investors and Accountability;
3. Listing for Stability: Stock Exchanges and Listing Requirements;
4. Banking Risk for the Long Term: Systemic Risk and the Basel Committee;
5. Rating Right: The Role of Rating Agencies within the Financial System; and
6. Insuring the Future: Stability and Solvency II.

At the end of each section, a brief overview of how the developments in the six areas relate to sustainable finance and responsible investment will be presented.

**Dark Pools and the Shadow Side: Stability and Over-the-Counter Markets**

Trading on Over-the-Counter markets, or OTC markets, as they are commonly known, has come under forensic examination by lawmakers across the world who are concerned that these lightly regulated markets enabled incalculable amounts of risk to build up in the global financial system.
OTC markets started on a trial basis in the United States in June 1990 as one of a number of market reforms to boost the transparency of stock trading in companies not listed on public exchanges. The difference between OTC markets and public markets is that on the OTC markets, where there has been an exponential increase since 2000 in the trading of a range of derivatives contracts, the quoted entities do not have listing standards.

Since the early experiments, the size of derivatives trading on OTC markets, essentially alternative trading platforms used by private counter parties to trade without the same reporting or disclosure requirements of exchange-based markets (such as the New York or London Stock Exchanges), grew to US$100 trillion by 2000 and then up six-fold to US$600 trillion by late 2008, a figure equivalent to 10 times global gross domestic product. According to the International Swaps and Derivatives Association, the outstanding notional amount of derivatives stood at over $454 trillion in mid-year 2009, which is 30 times the Gross Domestic Product of the United States. When the net figure of overlapping contracts (simply put, contracts that cancel each other out) is calculated, the Bank for International Settlements (BIS) estimates the net figure for derivatives contracts stood at US$34 trillion by the end of 2008. The implications of the growth of OTC markets can be appreciated when it is understood that “trading activity on the OTC is 60 trillion dollars annually, while turnover on the public market is 5 trillion.” Some market observers have questioned whether a global market that is only “8% transparent” is actually a market.

The growth of more opaque markets, many associated with a new breed of electronic trading platforms, have also attracted what have become known as “Dark Pools” of capital or liquidity that seek to benefit from the more lightly regulated markets and enable trading in equities and other instruments to be masked. Within this so called “shadow side” of finance, the trading and speculative roles played by, for example, hedge funds and the proprietary trading arms of banks, dealing for themselves or on behalf of large institutional investors, has come under intense regulatory examination since the financial crash. The ability to mask trading activities, some market observers suggest, acts to rob or restrict information from the market and poses the risk of

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47 Derivative: A security whose price is dependent upon or derived from one or more underlying assets. The derivative itself is merely a contract between two or more parties. Its value is determined by fluctuations in the underlying asset. The most common underlying assets include stocks, bonds, commodities, currencies, interest rates and market indexes. Most derivatives are characterized by high leverage. See http://www.investopedia.com/terms/d/derivative.asp.
50 “‘Dark pools of liquidity’ are crossing networks that provide liquidity that is not displayed on order books. This situation is highly advantageous for institutions that wish to trade very large numbers of shares without showing their hand,” in C. Quigley, “The day the free market died,” 2010, Financial Sense University, 13 May. See www.financialsense.com/fsu/editorials.
51 Ibid.
52 Ibid.
spreading liquidity thin. Proponents of OTC markets contend that these markets enhance efficiency, minimize transactional costs, reduce “information leakage” and give large institutions more freedom to trade without the “retail herd” tracking their every move. Given the political and regulatory outcry over OTC markets, many of these entities and the traders who are active on them understand that coming regulation will see them transformed into a more transparent “hybridized exchange model.”

In the aftermath of the 2008–2009 financial crisis and, understandably, given the size, opacity and complexity of the OTC markets, the overhaul of regulation of these markets, with an urgent need for greater transparency, became a high political priority, as these markets were considered to have heightened those systemic risks leading to financial instability. Concerns have been highest in the major OTC markets of the United States, the United Kingdom and the European Union, where regulations are being introduced to increase transparency and prudential governance across these markets. Governments are going to great lengths to assure their citizens that the threat of “systemic failure” will be controlled and are moving to ensure that all OTC derivatives and derivative dealers will be regulated and that all swap instruments (interest rate swaps, currency swaps, commodity swaps, credit default swaps and equity swaps) will be closely scrutinized and that no new swap instrument will slip between the “regulatory cracks.” In a basic mapping (see Appendix 6) of the proposed OTC market reforms across the United States, European Union, and United Kingdom (the major derivative markets), there appears to be broad convergence in terms of goals and direction of the regulation. However, a range of commentators have warned that, given the complexity of aspired international convergence for the regulation of OTC markets, the “devil in the details” might differ substantially on either side of the Atlantic. In their 5 June 2010 Communiqué, the G-20 Finance Ministers “committed to accelerate the implementation of strong measures to improve transparency, regulation and supervision of hedge funds, credit rating agencies, compensation practices and OTC derivatives in an internationally consistent and non-discriminatory way.” They also “called on the Financial Stability Board to review national and regional implementation in these areas and promote global policy cohesion.”

In the case of the European Union, commentators are already warning about coordination and execution hurdles, given that reforms are encompassed in several directives—the European Market Infrastructure Directive, to be tabled in July 2010, the EU Capital Market Directive, and the Alternative Investors Fund Management Directive, due to be enforced by member states in 2011. In the United States, most of the proposed changes are encompassed in the “Dodd’s Bill” passed by

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55 Ibid.
56 Restoring American Financial Stability Act.
the US Senate on 20 May 2010. Essentially, the goals of the ongoing reforms across the United States and the European Union are to:

1. Regulate all OTC derivative markets;
2. Regulate all OTC derivative dealers and other market participants;
3. Prevent manipulation, fraud, insider trading and other market abuses; and
4. Protect unsophisticated investors.

<table>
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<th>Box 3: The regulatory overhaul for finance (also see Appendix 6).</th>
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| Regulation is sweeping across other areas of finance as well as the OTC markets. The Volker plan, for example, in the United States proposes to separate the retail banks from investment banks in order to keep a check on the size of banks before they assume the status of “too big to fail.” A bank bailout tax was backed by the United Kingdom, United States, Germany and France, although there was a strong “push back” by other governments, led by Canada, against the idea of such a tax at the 5-6 June 2010 G-20 Finance Ministers meeting in Busan, Korea. Over the past year, variations on such a “bailout tax” have been floated and have ranged from mechanisms that would act as an insurance for banks, safeguarding both the taxpayers and the banks by creating a pool specifically for future bailouts, to mechanisms that would enable an “orderly closure” of failing or failed financial institutions. The United States Treasury outlines broader objectives in the Financial Regulatory Reform Report, which has five major objectives: (a) Promote robust supervision and regulation of financial firms; (b) Establish comprehensive supervision of financial markets; (c) Protect consumers and investors from financial abuse; (d) Provide the government with tools to manage financial crisis; and (e) Raise international regulatory standards and improve international cooperation.

To achieve these ends, the proposed OTC/derivatives reforms can be broadly considered to propose the following:

- Promote the standardization of OTC derivatives;
- Provide a definition for standard OTC derivatives;
- Require central clearing of standardized OTC derivatives in accordance with the September 2009 G-20 Communiqué, which called for “all standardised OTC derivative contracts to be cleared through central counterparties by end 2012 at the latest”;
- Require standardized OTC derivatives to be traded in regulated exchanges;
- Move more OTC derivatives into Central Clearing and Exchange Trading through higher capital requirements and higher margin requirements for non-standardized derivatives;
- Require transparency on transactions and positions in OTC derivative markets;
- Regulate all OTC derivative dealers and other major market participants;
- Provide regulators with the tools and information necessary to prevent manipulation, fraud, and abuse;
- Protect unsophisticated investors; and
- Require the registration of all relevant OTC derivative trades in trade repositories.
Relevance to Sustainable Finance and Investing

The immediacy and scale of trading activities on modern financial markets creates a fundamental gap between the short-term, opportunistic philosophy of the trading community and the more reflective stance of the proponents of sustainable finance and investment approaches. A combination of liberalizing global markets, technology advances creating powerful, interconnected international trading platforms and the ability to leverage high frequency trading\(^{57}\) activities in a low interest environment have resulted in daily markets where contracts worth hundreds of billions (US$) are transacted. For traders, “slow or creeping” risks are rarely on the radar screen unless a clear trend is seen to be driving “events” with significant market implications, while short-term environmental crises (British Petroleum’s oil slick disaster in the Gulf of Mexico being a case in point) quickly become trading opportunities as markets adjust to those events instantaneously.

Market-makers and trading activities bring the liquidity and volume upon which vibrant and diverse markets thrive and, as some would argue, play the instantaneous clearing role that is a unique strength of free-market capitalism. However, others would point to the 6 May 2010 so-called “flash crash,” when trading activity saw “some stocks briefly losing 99% of their value”\(^{58}\) and the major indexes dropped by 9 per cent, including “a roughly 7% decline in a roughly 15 minute span”\(^{59}\) as evidence that high frequency trading and speculation means the market system remains unstable in the extreme. There is a sense that the scale, speed and interconnectedness of trading across markets has come to be the dominant factor in how global equity markets interact.

Sustainable finance and responsible investment advocates “active ownership” that seeks to heighten the accountability between the ultimate owners of capital and the assets in which they are invested. Increasingly, the trading activity in modern capital markets runs counter to this as market actors with no interest in the long-term success of the companies in which they trade come to dominate. Michael Gordon, Chief Investment Officer, Equities, at BNP Paribas Asset Management, captures the sentiment well when describing the scale of high frequency trading:

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One example is the growth of high frequency trading. In the US, it has left the market often hostage to the consequences of behaviours that have little to do with the underlying long, medium or short-term economic realities of the stocks. This is so because as much as 70 per cent of the share trading volume on the US exchanges is now high frequency.60

The challenges that trading across modern financial markets poses for the sustainable finance and responsible investment communities are considerable. At many points along the investment and financial intermediation chains, there are increasing examples of “total disconnection” between financial institutions as they “move further and further from their customers and the knowledge of the products they are buying, selling or trading inevitably suffers.”61

It is clear that the requirements of transparency and accountability sit at the heart of regulatory efforts to reform OTC and derivatives markets and these include practical and pragmatic steps to see centralized clearing and trading on regulated exchanges. As noted, the values of transparency, accountability and responsibility are core to sustainable finance thinking and they feature heavily in the regulatory overhaul underway.

The clearest link between trading activities, OTC markets and derivatives with sustainable development is the systemic risk that instability in capital markets poses potentially for balanced long-term economic, social and environmental development. The area needs much deeper exploration.

Ownership that Counts: Institutional Investors and Accountability

The collective holdings by institutional investors (such as pension funds, sovereign wealth funds and insurance reserves) in financial services’ fixed income and equity positions grew exponentially during the boom years, in the first decade of the 21st century. The degree to which such asset owners, who hold and manage money in trust for their end beneficiaries, exercised their fiduciary responsibilities by questioning the governance, policy and operational practices and innovative products of financial institutions ahead of the crash is in question. Also, the role of those agents in the investment chain who make influential asset allocation decisions, notably pension fund consultants and brokers, is also being closely examined.

Whether through the origination and distribution of mortgage backed securities, the development of exotic derivative products, and/or high frequency trading practices, financial service companies helped to create a positive capital market wave during the boom period of 2002–2007. Those asset owners holding financial services stocks and bonds benefited greatly until late 2007, only to see a precipitous decline in the value of their holdings as the crash accelerated in 2008. As one market observer has noted: “In one week of October 2008, the value of global retirement assets took a hit of about 20 per cent.”62

The same institutional investors were also in the market for a range of asset-backed securities and associated derivative products at the epicentre of the initial sub-prime collapse. In essence, institutional investors were both fractional owners of financial institutions and at the same time were actively buying the innovative products those same institutions were bringing to the markets, in what has become known as an “originate and distribute model” rather than the traditional “originate and hold” model of banking. For banks, this evolution to “originate and distribute” meant they could shift risk from their balance sheets through the process of securitization and sale of various “income generating financial assets,”63 including bundled mortgages. The upside of the “originate and distribute” model was that it “permitted a potential improvement in the efficiency of the economy-wide mechanisms for intermediation and risk sharing.”64 The downside of “originate and distribute” was that it “destroys information.”65 The explanation of this by Willem Buiter, an economist, is worth considering in full:

The information destruction occurs at the level of the originator of the assets that are to be securitised. Under the “originate and hold” model the loan officer collecting the information on the creditworthiness of the would-be borrower is working for the Principal in the investing relationship (the originating bank or non-bank lending institution). Under the “originate and distribute” model, the loan officer of the originating banks works for an institution (the originating bank) that is an Agent for the new Principal in the investing relationship (the Special Purpose Vehicle (SPV) that purchases the loans from the banks and issues securities against them). With asymmetric information and costly monitoring, the agency relationship dilutes the incentive for information.66

64 Ibid.
65 Ibid.
If such financial innovation does lead to “information destruction” then it would appear legitimate to raise questions concerning the degree to which institutional investors understood what they were buying or the activities of the financial institutions in which they were investing. In the United Kingdom, regulators “questioned whether investors have in all cases truly understood the products they were buying and if there had been more effective and collective shareholder intervention whether the financial crisis” would have been as severe. Equally, in 2009 a group of asset managers noted: “Some have argued that the ongoing financial crisis may not have been so deep or so protracted if institutional investors had been collectively willing to challenge the financial institutions that were at the heart of creating the systemic risks within the financial system.” Others put it more bluntly, referring to “the banks’ investors who did little to stop the free for all.”

The losses incurred by institutional investors when “unrecognised and systemic risks wiped out more than a decade of investment returns” have focused attention on whether our traditional understanding of fiduciary duty is adequate for our complex, interconnected global financial markets, where product innovation has been such a focus. For example, in the United States, the large banks opposed a provision in proposed regulation “that would give banks a ‘fiduciary’ duty of care when dealing with pension funds or state and municipal governments.” Although US lawmakers have posed the contention that banks do have a fiduciary duty to clients when selling products, the industry view is that such responsibilities should come under softer “business standards, transparency, reporting and disclosure” or else would threaten banks’ roles as market-makers and their ability to bring liquidity at scale to new markets.

A fundamental question, therefore, for institutional investors (such as in pension funds) is whether they have “an obligation to measure and manage exposure to those risks” and where their fiduciary duties, and those of other actors in the investment chain, lie.

Relevance to Sustainable Finance and Investing

Since publication of the Freshfields Report in October 2005, there has been a development of “soft law” across various jurisdictions that highlights a clear and developing trend whereby a

68 UNEP FI’s Asset Management working group is a group of 15 asset managers representing approximately US$2 trillion in assets under management.
69 UNEP FI, 2009, “Fiduciary responsibility.”
71 Network for Sustainable Financial Markets (NSFM), “Greater focus being given to understanding the role of fiduciary duty in economic sustainability.”
73 Ibid.
74 Network for Sustainable Financial Markets (NSFM), “Greater focus being given to understanding the role of fiduciary duty in economic sustainability.”
consideration of broader risk issues by investors, including environmental, social and governance (ESG) considerations, is not just permissible but in many cases is obligated. In the case of institutional investors and the subprime collapse that led to the financial crisis, many questions surrounding the governance of banks in which they invested, including policies and practices regarding the fundamentals of risk management at the institutional and systemic levels, appear to have gone unasked at worst and raised but not pressed at best. The foreword to the Freshfields legal interpretation states:

In our business, the investment business, ethical conduct extends beyond not breaking the law to properly interpreting what is in the best interests of the savers who are the ultimate beneficiaries of the institutional pools of money we are engaged to oversee or manage. This is where the interesting questions concerning fiduciary responsibility come to the fore: are the best interests of savers only to be defined as their financial interest?\(^76\)

The 2009 follow-up work to the Freshfields interpretation, Fiduciary Responsibility,\(^77\) goes further when it states: “Fiduciaries will increasingly apply pressure to their asset managers to develop robust investment strategies that integrate ESG issues into financial analysis, and to engage with companies in order to encourage more responsible and sustainable business practises.”\(^78\)

As noted previously, the April 2006-launched, UN-backed Principles for Responsible Investment (PRI)\(^79\) (Appendix 2) is now signed by 742 institutions\(^80\) representing in excess of US$21 trillion in assets. The six PRI core principles are supported by a list of thirty or so “possible actions” that signatory organizations can take in order to operationalize their commitment to the Principles. Going forward, adherence to these voluntary Principles would demand a greater engagement with and more demanding requirements for disclosure by investee companies, including financial service organizations. An extract from the first three of the six Principles highlights the point, in that institutional investors commit to the following:

1. We will incorporate ESG issues into investment analysis and decision-making processes.
2. We will be active owners and incorporate ESG issues into our ownership policies and practices.

\(^75\) UNEP FI/Freshfields Bruckhaus Deringer, 2005, “A legal framework.”
\(^76\) V. Zeller and C. Joly, Foreword to the 2005 “Freshfields report,” October.
\(^77\) UNEP FI, 2009, “Fiduciary responsibility.”
\(^78\) Ibid.
\(^79\) For more on the UN Principles for Responsible Investment (UNPRI), see www.unpri.org.
\(^80\) Figures presented to the PRI Board in May 2010: a total of 742 institutions have signed the UNPRI, broken down as 204 asset owners, 396 investment managers, and 142 professional service partners.
Possible actions: Develop and disclose an active ownership policy consistent with the Principles; Develop an engagement capability (either directly or through outsourcing); Participate in collaborative engagement initiatives.

3. We will seek appropriate disclosure on ESG issues by the entities in which we invest.

Deepening the aspirational commitments of the Principles, the Fiduciary II report of 2009 explicitly calls for the following:

Global capital market policy-makers should also make it clear that advisors to institutional investors have a duty to proactively raise ESG issues within the advice that they provide, and that a responsible investment option should be the default position. Furthermore, policy-makers should ensure prudential regulatory frameworks that enable greater transparency and disclosure from institutional investors and their agents on the integration of ESG issues into their investment process, as well as from companies on their performance on ESG issues.

Listing for Stability: Stock Exchanges and Listing Requirements

(This section draws heavily on work underway by Steve Waygood of Aviva Investors)

High quality, comparable information and supporting verifiable data are the most critical commodities for well governed and smoothly functioning capital markets. Without the flow of accurate, trustworthy information and sound data, capital markets are challenged in their primary functions of allocating fairly priced capital to productive companies that are capable of sustained success and, in turn, rewarding their investors and ultimate owners.

Progressive companies around the world, in an increasing number of important extractive, industrial and commercial sectors, have come to understand that long-term shareholder value is enhanced by both embedding ESG considerations into their long-term strategies and by fully disclosing their progress to investors. Only when investors have high quality, business relevant information at their fingertips can they truly assess one company relative to its peers and allocate capital accordingly.

More generally, it is clear that one of the underlying causes of the financial crisis was the incentive structure throughout the markets. This focused too many market participants on short-term profits. They looked only so far as the next quarterly earnings, at the expense of paying attention to the longer-term fault lines that were emerging. A compounding problem was that much of the information available to investors—on executive pay, the environmental and social impact of a company, on financial structuring and business practices—was itself short-term and inadequate. It

81 UNEP FI, 2009, “Fiduciary responsibility.”
was challenging for investors to assess with any accuracy which companies were suitable candidates for their investment and which would provide them with the best long-term returns. This lack of information eventually negatively affected the entire market.

An increasing number of institutional investors, in light of the financial crash and as a result of a growing appreciation of the actual and potential value destruction stemming from a failure to account for a broader range of financially material business risks, are “calling for all stock market listing authorities to make it a listing requirement that companies, firstly, consider how responsible and sustainable their business model is, and, secondly, put a forward looking sustainability strategy to the vote at their annual general meetings (AGMs).”

Building on a rapidly evolving body of research exploring financial materiality and a range of systemic risks as well as more narrowly focused ESG risks, the German bank, WestLB, published a study in 2007 reviewing the materiality of such factors based on a sample of 540 European firms. The WestLB report found evidence of a link between extra-financial risk, cost of capital to a firm and shareholder value. The report suggested that compiling a sustainability report was among the most important catalysts for change—contributing to accumulation of knowledge, questioning of processes and the establishment of suitable structures and practices.

Also, investment bank Goldman Sachs has carried out analysis of the relationship between how companies address these ESG issues and the returns they generate. It contends that in a number of sectors there is a direct correlation between sustainable business practices and the longer-term financial success of the company. However, in a 2009 report Goldman Sachs explained that the quality, quantity and nature of reporting still holds great scope for improvement of writing:

While the volume of reporting has increased significantly, a material number of companies do not report even relatively undemanding data points. Regionally, disclosure tends to be less complete in emerging markets in particular. Where data is reported, analysis is challenged by differences in reporting standards and guidelines across regions and companies...more widespread disclosure across companies and reporting on a wider range of issues, on a consistent basis, will be key to ensuring investors are able to fully assess the effectiveness with which companies are addressing the breadth of issues facing their industries.

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82 “Collaborative engagement proposal for more sustainable stock exchanges,” 2010, a paper prepared for the Sustainable Stock Exchanges event, Xiamen, China, co-hosted by the United Nations Conference on Trade and Development (UNCTAD), the UN Global Compact (UNGC) and the PRI, a collaborative investor initiative in association with UNEP FI and UNGC, 8 September.


This is further evidenced by the challenges that the business information and news organization Bloomberg is facing with its efforts to populate its terminals with ESG data on the companies that the organization covers. Only around 15 per cent\textsuperscript{86} of the almost 20,000 companies that Bloomberg examines publish data of sufficient quality and consistency to be used in that exercise.

**Relevance to Sustainable Finance and Investing**

The incentives structures in the capital markets that promote short-termism mean the markets themselves have become too near-sighted in the way they evaluate companies. One root cause is that fund management organizations are evaluated by their clients—for example, pension funds—based on criteria that are themselves too short-term. This, in turn, motivates fund management institutions to incentivize and evaluate their individual fund managers and analysts based on performance over time frames that are excessively short, leading to too much attention on short-term financial performance. The behavioural problem with this is that when these individuals meet with company directors, the tenor of their questions and their consequent trading decisions leads company directors who wish to enhance shareholder value to focus too much attention on the quarterly earning figures at the expense of investing in the long-term health of the company.

This maximization of short-term results is a long-term problem for the economy as a whole: if the capital market does not sufficiently factor in long-term capital investment returns, then it undermines long-term investment decision-making by company directors as a whole and leads them to allocate insufficient capital to invest in the long-term health of companies overall. Although a lack of focus on the long-term financial health of a company is a general problem, as many sustainable development issues are inherently long-term, short-termism is also a particular problem for sustainable development—it systematically erodes incentives for company directors to invest in sustainable businesses.

In November 2009, the UN Secretary General, Ban Ki Moon, addressing an event exploring sustainable stock exchanges in New York\textsuperscript{87} told the event: “Stock exchanges and other financial bodies have a key role to play. Many of you have taken important steps to advance this agenda. I welcome your efforts to incorporate ESG issues into new stock exchange indices, listing rules and regulatory frameworks.”

\textsuperscript{86} According to recent estimates by Bloomberg.

\textsuperscript{87} “Sustainable Stock Exchanges,” an event convened at UN Headquarters, New York, hosted by UNCTAD, UNGC, and PRI, 2 November 2009. See http://www.unpri.org/sustainablestockexchanges09.
Banking Risk for the Long Term: Systemic Risk and the Basel Committee

The Basel Committee on Banking Supervision (BCBS),\textsuperscript{88} part of the BIS, sits at the centre of efforts to balance the need for banks to set aside more capital and ensure stronger liquidity to bolster the stability and resilience of the financial system while ensuring sufficient lending to foster economic growth. BCBS’s current work, building on lessons being learned from the financial crisis, also seeks to pre-empt and counteract the worst impacts of future financial system crises.

BCBS concerns itself both with macro prudential regulation, working to ensure the stability of the whole financial system, and micro prudential regulation, which seek to bolster the stability of individual institutions (see Appendix 1). Since its 1988 publication of the Basel Accord, known as Basel I, the BCBS has worked to deliver banking standards and these have been updated in the decade since 1999 as part of the Basel II process. This updated Basel II standard was being rolled out by the banking systems in a number of developed economies when the 2007–2008 financial crisis hit. Current efforts underway to overhaul the global financial system, in part, reflect criticisms of the Basel II agreement that was viewed by some observers as encouraging the “pro-cyclical” nature of finance by, essentially, feeding asset bubbles and deepening economic downturns. The stated intention of BCBS is to see an overhauled—some have termed it “Basel III”—standard implemented across the banking sector by the end of 2012, although certain changes to capital requirements were enacted in 2009 as part of an urgent response to the crisis. BCBS’s current consultations are to:

1. Strengthen the resilience of the banking sector; and
2. Provide an international framework for liquidity risk measurement, standards and monitoring.

See Appendix 1 for additional detail on current BCBS negotiations.

The BCBS’s consultative document\textsuperscript{89} published in December 2009 states directly:

The objective of the Basel Committee’s reform package is to improve the banking sector’s ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spillover from the financial sector to the real economy...Through its reform package, the Committee also aims to improve risk management and governance as well as strengthen banks’ transparency and disclosures.

\textsuperscript{88} The BCBS is convened under the auspices of the Bank for International Settlements based in the Swiss City of Basel. The origins of the BCBS date back to the collapse of a German Bank in 1974.

\textsuperscript{89} “Strengthening the resilience of the banking sector,” 2009, BCBS Consultative Document (for comment by 16 April 2010), Bank for International Settlements, December.
The Chair of the BCBS acknowledged in May 2010 that proposed banking rules as part of international efforts to boost the financial system’s and the sector’s resilience could cut world economic growth by up to 1 per cent. The Chair suggested also that this was a price worth paying for a more stable and resilient banking system to underpin sustainable, long-term economic growth and development. Some banking industry observers have argued that the new rules, which will go to a BCBS vote in November 2010 for implementation in 2011–2012, will cut global economic growth by as much as 5 per cent, although this has been dismissed by policy-makers.

The executive summary of the BCBS’s consultative document echoes the plain language of the April 2010 Communiqué by G-20 Finance Ministers when it describes the importance of the banking sector to promote stable growth:

A strong and resilient banking system is the foundation for sustainable economic growth, as banks are at the centre of the credit intermediation process between savers and investors. Moreover, banks provide critical services to consumers, small and medium-sized enterprises, large corporate firms and governments who rely on them to conduct their daily business, both at a domestic and international level.

Those familiar with efforts to quantify the economic risks of climate change will be struck by some similarities of the figures presented around both financial stability and climate stability. As noted, the Chairman of BCBS estimated in May 2010 that the cost of the new banking rules to ensure a stable and resilient financial system could see a reduction of 1 per cent of global Gross Domestic Product (GDP). In October 2006 the UK Treasury’s Stern Review suggested that early action on climate change would require an investment of 1 per cent of global GDP per year to head off the risk of a potential reduction of global GDP by some 20 per cent if no action is taken to combat the impacts of climate change. In June 2008 the Stern Review’s 1 per cent estimate was increased to 2 per cent as a result of faster-than-expected climate change. The Stern Review states: “Our actions over the coming few decades could create risks of major disruption to economic and social activity.”

This prompts the question, how do long-term systemic risks, such as climate change, figure into the BCBS considerations? The short answer is that they don’t.

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When the financial materiality of a given risk falls into a “grey area,” whether because public policy is not working to internalize the risk, the issues are long-term in nature and beyond the normal considerations of the financial system, or the risk is not sufficiently hard-wired into current financial and accounting practice, then significant long-term systemic risks have been largely underplayed in the capital requirement calculations. To date, the degree to which ESG risks are factored explicitly into BCBS considerations is limited, due largely to a focus over the past 30 years on classic banking factors in BCBS considerations and partly because of the historical difficulties in establishing the financial materiality of such risks.

Where shifts in public policy set in train processes to strengthen the financial materiality of a range of these risk issues, the case for inclusion in financial policy considerations and supervisory regulations for both the financial system and individual institutions builds. However, there is a significant lag between a clear reflection of such risks in public policy at global, regional and national levels and the hard wiring, notably pricing of risk, into the inner workings of our financial system at the most granular level (such as, for example, the capital adequacy calculations). Notably, this relates to the system’s inability to establish adequately the short- to long-term relevance and financial materiality of the emerging risks, the subsequent limited ability of our accounting and financial analytical frameworks to assess direct quantifiable liabilities that impact asset valuation and, particularly for the banking sector, understanding and quantifying the credit risk and default implications, as well as the negative impact on collateral, of the emerging risks. Also, the speed with which financial institutions are able to transfer risk into the system by removing the liability from their own balance sheets is an important factor in the assessment of how these emerging risks impact banking operations and the degree to which they are financially material for individual institutions.

Recent international developments back the financial materiality argument for inclusion, in time, of a broader range of risks issues within BCBS considerations and perhaps for an explicit recognition of emerging systemic risks. There are continuing difficulties in correlating both long-term systemic risks and certain shorter-term ESG risks with credit default events.

**New Risks in BCBS Processes**

To highlight the case made above for the explicit inclusion, in time, of a broader range of emerging systemic risk issues in BCBS processes, the paper looks briefly at two areas of emerging banking risk: first, at the changing financial materiality of risks related to climate change, including liabilities associated with greenhouse gas emissions given the emergence of a price for carbon; second, at the financial liabilities associated with the use of chemicals in production processes and products.
**Risks around Climate Change**

As carbon liabilities are more effectively internalized within our accounting and financial systems, banks will be affected increasingly, both directly through impacts on the value of their own capital and indirectly through changes to the value and risk profiles of the loan portfolios of institutions and the collateral held against those loans. Climate change creates concerns at the macro prudential level in terms of its long-term systemic risks that jeopardize whole regions, economies and industries, as well as at the micro prudential level in terms of risks embedded in the financing and investment undertaken by banks. The policy, legislative and regulatory changes underway in many countries to more fully account for a broader range of ESG risks will also strengthen the fiduciary duty\(^{94}\) and fiduciary legal\(^{95}\) arguments that call for a full and proactive effort to integrate financially material risks into all aspects of investment policy-making and investment decision-making. These changes have implications for banks as well as the many other forms of financial intermediaries that exist along the investment chain, from the large asset owners who have fiduciary responsibility for the assets of the ultimate beneficiaries, such as pensioners, to the broad spectrum of companies, projects and asset classes that make up the investee ecosystem.

Within the context of climate change, key international developments that will set in train processes to internalize climate-related risks into the financial and investment systems include, but are not limited, to:

1. In the United States, there are several important developments enacted or pending, including:
   - Securities and Exchange Commission’s (SEC) Interpretive Guidance on Disclosure Regarding Climate Change: On 27 January 2010, the SEC voted to provide public companies with interpretive guidance on existing SEC disclosure requirements as they apply to business or legal developments relating to the issue of climate change;
   - American Clean Energy and Security Act (“Climate Bill”): Currently with the Senate, this bill would introduce a form of “cap and trade” (economy-wide or limited to utilities) as well as possible carbon taxes for the transportation and oil industries;

2. In the United Kingdom: The Climate Change Act 2008 places a legally binding long-term framework to cut carbon emissions and also creates a framework for climate change adaptation policy;

3. In the European Union: The “EU 2020” strategy (approved in June 2010) aims to transform the region into a low-carbon, eco-efficient economy;

4. China: Circular Economy Law (2009);

5. Korea: Basic Law on Low Carbon and Green Growth (2010); and

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\(^{94}\) UNEP FI, 2009, “Fiduciary responsibility.”

\(^{95}\) UNEP FI/Freshfields Bruckhaus Deringer, 2005, “A legal framework.”
6. Japan: The basic act on anti-global warming measures (2010) was agreed upon by the Cabinet in March 2010 and will be presented to the Diet.

Other non-legislative international developments creating demand for financial and investment approaches that more fully reflect carbon risk include frameworks for carbon footprint disclosures such as ISO 14067, introduced in October 2010, with a focus on the carbon footprint of products. Also, the Carbon Disclosure Project (CDP), a voluntary initiative backed by investment institutions representing assets in excess of US$50 trillion, will expand its work to explore the carbon footprint of companies.

Finally, the Accounting for Sustainability project, an initiative of the Prince of Wales, convened in July 2010 an International Steering Committee comprising heads of accounting firms, stock exchanges and leaders of business and international organizations to drive the idea of an International Integrated Reporting framework that would more effectively account for a broader range of environmental and social risks alongside those accepted traditionally as part of accounting practice.

Although climate change, with the slow emergence of a global policy framework and a hard carbon price already embedded in some regional markets, is a clear focus for policy-makers and financial markets, the arguments above apply equally to a broader range of systemic risk issues such as resource scarcity and biodiversity and ecosystems degradation. The paper now takes a brief look at one area where hard financial liabilities for the banking sector have been recognized for some time.

**Financial Risks of Toxic Corporate Footprints**

In April 2010, 1,500 Britons were awarded compensation payout of US$30 million as a settlement against severe burns from “toxic sofas” manufactured in China. This is believed to be the largest consumer group litigation in British history.

In 2002, in the United States, toxic litigation risks linked to asbestos amounted to US$70 billion in the form of 730,000 personal industry claims; 66 firms were driven to bankruptcy. By 2005 it was estimated that the total cost of asbestos litigation in the United States was US$250 billion.

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96 The Carbon Disclosure Project is an independent, not-for-profit organization holding the largest database of primary corporate climate change information in the world. See https://www.cdpproject.net/en-US/Pages/HomePage.aspx.

97 The Accounting for Sustainability initiative brings organizations together to enable environmental and social performance to be better integrated with strategy and financial performance. See http://www.accountingforsustainability.org/home.


In 2001, The Netherlands banned the sale of Sony PlayStation consoles because the amount of cadmium in accessory cables exceeded regulatory limits. Sony then began to review its specifications and supply chain management processes but incurred losses (in lost sales and costs) of about US$150 million.\footnote{R. A. Liroff, “Benchmarking corporate management of safer chemicals in consumer products—A tool for investors and senior executives,” 2005, Investor Environmental Health Network and the Rose Foundation.}

The increasing spate of lawsuits linked to toxic and chemical risks in products and supply chains is having important implications on investment decisions, shareholder value and fiduciary duty. The Fiduciary II\footnote{UNEP FI, 2009, “Fiduciary responsibility.”} report concludes that “there is significant evidence of the positive and negative impacts environmental, social, and governance issues can have on share prices.” This report also opens the discussion on the fact that as ESG risk affects shareholder value, it falls into the category of information that a reasonable investor would consider to be significant and therefore needs to be considered by all fiduciaries.

Under corporate and investment law (in North America and the United Kingdom), fiduciaries are under a clear duty to monitor their investments. For example, the Uniform Prudent Investor Act (United States) states that there is “continuing responsibility for oversight of the suitability of investments already made.”\footnote{Uniform Prudent Investor Act (USA), 1992, Section 2.} This includes a duty “to examine information likely to bear importantly on the value or the security of an investment.” As further stated in the Restatement of the Act, “the trustee has a related duty of care in keeping informed of rights and opportunities associated with those investments.”\footnote{Uniform Prudent Investor Act (USA), 1992, The Third Restatement of Trusts.}

Although many would argue that caveats appear in the application of the law (for there is little additional guidance from the courts and regulators on the scope of the duty to monitor), there are increasing numbers of fiduciary-linked initiatives to assess and evaluate environmental and worker or public health risks posed by chemicals mismanagement that have potential to result in significant costs for negligent companies, including accident clean-up/remediation, compensation payments and loss of brand value. The most notable is perhaps the Investor Environmental Health Network (IEHN), which in 2007 was involved in 11 shareholder resolutions on toxic chemicals and environmental health in the United States.\footnote{See http://www.iehn.org/home.php.} The IHEN works through engagement and shareholder resolutions to encourage companies to adopt policies to reduce and eliminate the toxic chemicals in their products, processes and supply chains. As of early 2008, IEHN members managed more than $41 billion in assets.\footnote{Ibid.}
One of the multiplier effects of this wave of shareholder activism has been that proxy advisors such as Institutional Shareholder Services (ISS) have begun to revisit their policies on the prudence of considering environmental risk factors. ISS now recommends a FOR vote on shareholder resolutions requesting disclosure of policies related to toxic chemicals, a notable step given that until 2006, the institution did not have a policy on toxics.\textsuperscript{107}

\textbf{Relevance to Sustainable Finance and Investing}

The assessment and deeper understanding of a full range of economic, environmental, social and governance risks, whether systemic or local, is central to the philosophy of sustainable development. Both the Precautionary Principle\textsuperscript{108} and the “softer” Precautionary Approach\textsuperscript{109} have been central to those intergovernmental policy-making discussions since the mid-1980s that have sought to foster the ideas behind sustainable development and promote global and national policy frameworks that will facilitate such development paths. The intergovernmental community took science and high policy as their start point as they sought to frame how mankind should deal with the “tragedy of the commons”\textsuperscript{110} or, as an economist would put it, how environmental and social externalities should be integrated into political, economic and social systems that traditionally had not sought to price or account for them.

With risk as a central theme, however, these policy-focused intergovernmental concepts and the discussions driving them have been far removed from the risk-focused deliberations around the BCBS.

Since 1988, BCBS has convened narrow discussions with a definitional, legal and technical focus that hold profound implications for how banking is carried out throughout the world. In many respects, the evolution of sustainable finance and responsible investment disciplines has been an unspoken effort to bridge the risk considerations of the intergovernmental policy world with that of the banking and other financial and capital market supervisory communities.

The banking supervisory community might argue that there is ample scope to consider sustainability risk issues within the existing BCBS parameters and that such risk is actually already factored into

\begin{footnotesize}
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\item \textsuperscript{107} Fiduciary guide to toxic chemical risks, 2007, Investor Environmental Health Network and the Rose Foundation for Communities and the Environment, March.
\item \textsuperscript{108} The precautionary principle states that if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those taking the action.
\item \textsuperscript{109} In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation,” Principle 15 of the Rio Declaration, 1992 United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, Brazil.
\end{itemize}
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the Committee’s well structured deliberations. Equally, the sustainability community might contend that rapid acceleration in public policy, legislative and regulatory efforts to quantify sustainability risk and see them embedded in the markets normal assessment, pricing and accounting standards means that they deserve a specific focus within both the structural (macro prudential) and operational (micro prudential) considerations of BCBS. This paper will propose the creation of a joint BCBS–UNEP FI working group to further explore the matter.

Rating Right: The Role of Rating Agencies with the Financial System

In the aftermath of the financial crisis, the products and services provided by the three largest international Credit Rating Agencies (CRAs), which together control the vast majority of the market, serving the rating needs of the financial services and investment sector, have come under an intense spotlight in terms of their transparency, independence and potential conflict of interests. Some of the most pointed political criticism to date came in early May 2010 when the President of the European Union, Jose Manuel Barroso, highlighted what he termed the “deficient work” of the agencies. Lawmakers in the European Union and United States have signalled a much tighter regulatory environment for CRAs and notably for those rating activities related to sovereign debt. Also, EU regulators have cited their concerns relating to the overwhelming market dominance by the three largest CRAs, Standard and Poor’s, Moody’s, and Fitch.

Post the financial crisis, the G-20, the International Organization of Securities Commissions (IOSCO), the US SEC and the European Union have all strengthened codes, standards and regulation to bring greater oversight to the CRAs and it appears that with ongoing market volatility, specifically linked to sovereign debt ratings, they are preparing to promulgate and enforce still stronger regulations. In their 5 June 2010 Communiqué, the G-20 Finance Ministers reiterated that they were “committed to accelerate the implementation of strong measures to improve transparency, regulation and supervision of hedge funds, credit rating agencies, compensation packages and OTC derivatives in an internationally consistent and non-discriminatory way.”

Also, in June 2010 it was confirmed that the European Securities and Markets Authority (ESMA) will “take control of the registration and supervision of credit rating agencies” providing a

111 Moody’s Investor Services and Standard & Poor each control 40 per cent of the world credit rating market, while the third of the world’s three largest raters, Fitch Ratings Ltd., has a significantly smaller but growing share. Source: Wikipedia.
112 Reuters, Brussels, 5 May 2010.
113 IOSCO brings international security regulators together to ensure higher standards of securities and market regulation and to maintain the integrity of markets. See http://www.iosco.org/about.
115 “European Securities and Markets Authority (ESMA) will take control of the registration and supervision of credit rating agencies,” 2010, Investment & Pensions Europe (IPE), online edition, 3 June.
centralized system to be introduced in early 2011. As an indication of the speed of regulatory changes in the CRA field, the move to centralized control by ESMA itself supersedes an earlier plan for the Committee of European Securities Regulators (CESR) to “coordinate a supervisory model based on cooperating national authorities.” While introducing the changes, the European Commission recognized that the regulations “did not deal with important issues, such as whether European and national legislation relies too heavily on credit ratings, and how to create more competition in the market.”

The role of CRAs during the rapid growth and investor uptake of structured financial products, instruments brought to market by a limited number of investment banks that were at the centre of the subprime collapse, has come under particular scrutiny, as has the “issuer pays” model underpinning the highly profitable CRA business. Essentially, the CRA model evolved in a manner that reduced “the burden on investors to research the creditworthiness of a security or issuer.” Some argue also that elements of the regulatory function in some jurisdictions, in effect, were outsourced to the CRAs.

The oligopolistic concentration of three dominant CRAs, 15 major investment banks and four large global accounting and auditing firms “reduced diversity and encouraged herd behaviour,” according to Professor Michael Mainelli, one of the thought leaders behind the concept of Long Finance. This oligopolistic core “failed in an environment of increasing money supply and global saving imbalances.”

In essence, the CRAs were instrumental in a process that saw a superacceleration of structured products, often poorly understood by mainstream institutional investors, into the marketplace in a manner that outstripped the ability of regulators and supervisory bodies, internationally and nationally, to keep pace with and understand fully the systemic implications of these market innovations.

Historically, the role of CRAs, providing opinions on the creditworthiness of issuers of securities and other financial obligations, has played a critical role in “the investment decisions of both investors and the availability of capital to companies.” For a long time, the large CRAs retained a

116 Ibid.
117 Ibid.
119 Ibid.
120 M. Mainelli, “Long finance: When would we know our financial system is working?”, presentation to The Insurance Institute of Ireland, 3rd Annual Industry Leaders Summit, Dublin, 8 October 2009.
122 Ibid.
peculiar status with regulators in the United States—that of financial information providers similar to the status of journalists—that protected them from the type of private litigation often seen in other parts of the financial regulatory standards, such as capital adequacy requirements for financial institutions and determining disclosure requirements “predicated on credit ratings.”

The financial crisis prompted a range of regulatory reforms targeting CRAs and, with the recent legal action by the US SEC against Goldman Sachs and one of the company’s executives, attention has again turned to the role of the raters in the growth of the structured finance markets.

Relevance to Sustainable Finance and Investing

Issues related to transparency, the impact of CRA products and services on market and corporate governance, and conflicts of interest related to the “issuer pays” forge a direct link between CRA activities that run counter to the sustainable finance and investing approach. The seeming inability of mainstream rating models to factor in a full range of financially material considerations, or at least adjust to a changing policy environment that, in time, will demand the integration of a broader range of ESG risks, is a problem with systemic implications when there is such market dominance by just three institutions.

The regulatory response toward CRAs has been swift, and notably so, given the association of their sovereign ratings to heightened volatility in several European markets. In June 2010 the European Union Internal Market and Services Commissioner, Michel Barnier, clearly indicated a future regulatory focus on CRAs when he said, “The changes to rules on credit rating agencies will mean better supervision and increased transparency in this crucial sector. But they are only a first step. We are looking at this market in more detail.”

But concerns about the role of CRAs are not new. From the dot.com collapse of 2000, through the corporate governance scandals of 2001–2002 and now on to the financial crisis of 2007–2008, the question has been asked repeatedly, “how are rating agencies evaluating the non-financial side of risk, and given the rapidly changing nature of material business risk, how should non-financial risk be assessed in the future by rating agencies?”

In answering this question there has been a clear split between the large, dominant CRAs and smaller specialist rating agencies that, as part of their model, seek to integrate a full range of ESG issues. For mainstream raters, the material threat of non-financial risks largely depends on the

126 “European Securities and Markets Authority (ESMA) will take control,” 2010, IPE.
nature, timing and sectoral impact of the risks because “if risks are long-term, they generally do not tend to be factored into mainstream ratings that assess default risk over a limited period and short-term performance.”\textsuperscript{128}

When questioned on the potential conflicts of interest inherent in the “issuer pays” business model of the CRAs, the raters have traditionally contended that the importance of their brand independence and the accuracy of their ratings act as an efficient internal regulator. Questions raised around CRA performance in the run up to and during the financial crisis have placed this argument under pressure.

Historically, mainstream CRAs have insisted that integration of “non-traditional” risks into their ratings depends upon:

- when the business case is satisfied and can be quantified as material to the company’s default risk or market performance;
- whether those ESG risks have immediate financial implications that are material to gauging default risk and equity performance; and
- the precise financial materiality of reputation risk, as this type of risk is often short lived and holds limited relevance in the long term with respect to a company’s ability to meet its obligations.

Given criticism of the whole CRA model since the financial crisis, a January 2003 report, written at a time shortly after markets turned down following the dot.com collapse and corporate governance scandals, was prophetic when it stated:

> The bottom line is that financial systems have changed over the longest bull market of the 20th century and it is only given the current downturn that the rating agencies have been responding to these changes. Anticipation of developments regarding non-financial risk in the current bear market may be critical in defending the reputation of individual rating agencies and accurately assessing company liabilities.\textsuperscript{129}

\textsuperscript{128} Ibid.
\textsuperscript{129} Ibid.
Insuring the Future: Stability and Solvency II

Introduction

The solvency margin is the amount of regulatory capital an insurance undertaking is obliged to hold against unforeseen events.\(^{130}\) A solvency regime seeks to ensure that insurers maintain financial soundness at all times, thereby protecting policyholders and the stability of the financial system.

The EU Solvency II project aims to establish a modern regulatory system for the European insurance industry through a revised set of harmonized EU-wide capital requirements and risk management standards. It is designed to underpin the stability of the financial system through the proper economic evaluation of risks on both sides of an insurer’s balance sheet. Its key objectives are better regulation, deeper integration of the EU insurance market, enhanced policyholder protection, and improved competitiveness of EU insurers.

From Solvency I to Solvency II

The EU insurer solvency regime has been in place since the 1970s. In the 1990s, the European Commission conducted a review of the EU solvency regime, and adopted in 2002 a limited reform known as Solvency I. Essentially, the calculation of capital requirements under the Solvency I framework is based on volume, either premiums or claims. However, it became clear during the Solvency I process that a more fundamental and wide-ranging reform was necessary, which led to the Solvency II project. Solvency II is similar to the Basel II capital adequacy requirements for banks.

What is New about Solvency II?\(^{131}\)

Solvency II will introduce economic risk-based solvency requirements across all EU member states for the first time. These new solvency requirements will be more risk-sensitive and more sophisticated than in the past, thus enabling a better coverage of the real risks run by any particular insurer. The new requirements move away from a crude one-model-fits-all way of estimating capital requirements to more entity-specific requirements.

Solvency requirements will also be more comprehensive than in the past. Whereas at the moment the EU solvency requirements concentrate mainly on the liabilities side (i.e., insurance risks), Solvency II takes account of the asset-side risks. The new regime will be a “total balance sheet”-type regime where all the risks and their interactions are considered. In particular, insurers will now be required to hold capital against market risk (i.e., fall in the value of insurers’ investments), credit risk

\(^{130}\) “Solvency II FAQs,” European Commission.

\(^{131}\) Ibid.
Financial Stability and Systemic Risk: Lenses and Clocks

(e.g., when third parties cannot repay their debts) and operational risk (e.g., risk of systems breaking down or malpractice). These are all risks that are currently not covered by the EU regime. However, experience has shown that all these risk types can pose a material threat to insurers’ solvency.

Although one of the big steps forward under the new regime will be the introduction of more risk-sensitive solvency requirements and adopting the “total balance sheet” approach to measuring solvency, the new regime also emphasizes that capital is not the only (or the best) way to mitigate against failures. Under Solvency II, new rules will for the first time compel insurers specifically to focus on and devote significant resources to the identification, measurement and proactive management of risks.

Together with a greater focus on risks and their management, the new solvency system will also adopt a more prospective focus. Whereas at the moment solvency requirements are based on largely historical data, the new rules will require insurers also to think about any future developments, such as new business plans or the possibility of catastrophic events that might affect their financial standing. A new development in this area will be the introduction of the Own Risk and Solvency Assessment (ORSA).

Another new requirement is the Supervisory Review Process (SRP). The purpose of the SRP is to enable supervisors to better and earlier identify insurers who might be heading for difficulties. Under the SRP, supervisors evaluate insurers’ compliance with the laws, regulations and administrative provisions adopted pursuant to this directive and its implementing measures.

The new rules require insurers to disclose certain information publicly to a far greater extent than currently is the case. This will bring in “market discipline,” which will help to ensure the soundness and stability of insurers, as market players will be able to exercise greater supervision over and offer greater competition to other insurers. Insurers applying “best practice” are more likely to be rewarded by lower financing costs, for example.

Finally, the new framework will strengthen the role of the group supervisor who will have specific responsibilities to be exercised in close cooperation with the solo supervisors. This will mean that the same economic risk-based approach will be applied to insurance groups, which can now be better managed as a single economic entity. Furthermore, the new solvency provisions will foster and force greater cooperation between insurance supervisors and will further supervisory convergence.
Solvency II Architecture

Solvency II marks the transition from the current rule-based regulatory approach to one that is principle-based. It adopts three pillars of mutually reinforcing regulation.

The first pillar comprises quantitative requirements that ensure adequate financial resources through harmonized standards for the valuation of assets and liabilities and risk modelling of capital requirements.

The second pillar comprises qualitative requirements that ensure insurers have effective governance and risk management systems in place, as well as the effective supervision of insurers.

The third pillar comprises public disclosure and regulatory reporting of risks that would foster transparency, competition and market discipline.

Solvency II, the Financial Crisis and Systemic Risks

Solvency II requires insurers to adopt proactive and forward-looking risk management based on a total balance sheet and market-consistent approach, which should lead to enhanced risk-adequate pricing.

This overall view will enable capital requirements to be calculated with much greater precision. The importance of this was illustrated by the financial crisis, which was at least in part a consequence of reckless handling and inadequate evaluation of risks. The financial crisis has demonstrated that risks cannot be artificially calculated away. Strict risk- and principle-based rules are therefore needed more than ever.132

Furthermore, Solvency II’s reporting and disclosure requirements with respect to an insurer’s risk profile and governance and risk management systems will promote greater transparency, competition and market discipline as regulators, policyholders, investors and other market participants would have more information available. Accordingly, Solvency II is expected to reduce the dependence of market participants on the information provided by rating agencies, whose role in the financial crisis had attracted much criticism.

Finally, the financial crisis revealed that markets have truly become global and that there is a real need to better understand and manage systemic and long-term risks. In this vein, Solvency II represents a major step in the right direction. It captures both quantitative and qualitative aspects of

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132 “Solvency II: The key to the future of the insurance industry,” 2009, Munich Re Topics.
holistic risk management, promotes a better risk culture and risk communication between market participants, and provides incentives for insurers to run their business more prudently.

**Going Forward**

Solvency II aligns capital requirements more closely with an insurer’s complete risk profile. Equally important is that it is designed to improve governance and risk management, and enhance reporting and disclosure.

Indeed, as the Chairman of the European Commission’s Committee of European Insurance and Occupational Pensions Supervisors has said, “Solvency II is not just about capital. It is a change of behaviour.”

Overall, Solvency II is expected to result in more efficient allocation of capital, greater financial stability, enhanced policyholder protection, and increased competition in the market. It will be implemented by the end of October 2012 and is bound to influence the development of insurance regulations in other jurisdictions. Moreover, its principles could potentially pave the way for a global model that would set the same solvency framework and risk management standards for all participants in a global market.

Nevertheless, it is important to bear in mind that the many safeguards built into Solvency II do not translate to a “zero-failure” regime. In other words, Solvency II is not an ironclad guarantee that no insurer will ever fail.

**The Principles for Sustainable Insurance Initiative**

The UNEP Finance Initiative is undertaking a multi-year initiative, which will culminate in 2012, to develop Principles for Sustainable Insurance (PSI), including concrete actions to implement each Principle. The PSI will act as the global best practice framework to facilitate the systematic identification, analysis, management and monitoring of ESG risks and opportunities in core insurance company strategies and operations, including underwriting, product development, claims management, sales and marketing, and investment management. Equally, the initiative aims to establish a United Nations-backed global initiative of insurers proactively addressing ESG risks and opportunities based on their commitments to implementing the Principles.

**The Insurance Industry and Systemic ESG Risks**

The insurance industry has long been in the vanguard of understanding and managing risk and has served as an important early warning system for society by amplifying risk signals. Through loss prevention and mitigation, by sharing risks over many shoulders, and as major investors, the
insurance industry has protected society, catalyzed financing and investment, shaped markets and underpinned economic development.

The global risk landscape is rapidly changing and global ESG factors require new risk management and financing approaches. Given their multiple roles as risk managers, risk carriers and institutional investors, insurance companies have immense capacity to understand and manage ESG factors.

UNEP Finance Initiative research articulates that:

- The insurance industry is complex and requires a differentiated view on ESG factors (e.g., according to lines of insurance, insurance company operations);
- ESG factors influence risk underwriting, can have varying degrees of impact across lines of insurance, and can be material to both the insurance and investment sides of insurance company operations;
- Insurance practitioners increasingly find ESG factors material to their underwriting and product development, as well as to other core operations such as claims management, sales and marketing, and investment management. Therefore, ESG factors can enhance insurance company earnings, business performance and long-term company value;
- Insurance practitioners judge ESG factors to have significant loss potential in terms of their risk frequency, severity and uncontrollability. Equally, they judge that the societal response to managing the global, long-term and systemic risks posed by ESG factors is lagging and that prudential regulatory or legal frameworks are underdeveloped;
- The long-term economic health, resilience and stability of the insurance industry will increasingly be shaped by its ability to accurately assess and proactively address the impact of ESG factors on the insurance business. Accordingly, the global, long-term and systemic risks posed by many ESG factors can undermine the solvency of an insurance company and the long-term economic health, resilience and stability of the insurance industry, including insureds and entities financed by insurance capital;
- Effective ESG risk management and financing entail the systematic integration of ESG factors into core insurance company strategies and operations (e.g., underwriting, product development, investment management, claims management, sales and marketing);
- Through the systematic integration of ESG factors into core insurance company strategies and operations, the insurance industry—along with the individuals and entities that it

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133 Examples of global ESG factors include climate change, biodiversity loss and ecosystem degradation, water scarcity, pollution, financial inclusion, human rights, emerging manmade health risks, aging populations, regulations, disclosure, ethics and principles, and alignment of interests.

protects, and the entities in which it invests—will be able to sustain its economic activities and play its role in the transformational process to a sustainable and inclusive global economy; and

- Policy-makers and regulators should ensure prudential regulatory or legal frameworks on ESG factors, where appropriate. For example, potential frameworks that could enable greater transparency and disclosure from companies across sectors (including insurance) on their holistic ESG performance can help insurance companies assess their indirect ESG performance embedded in their insurance, reinsurance and investment portfolios and their supply chains. Such frameworks should be explored in close consultation with the insurance industry, and must carefully consider all aspects of insurance operations given the unique and multiple roles of insurance companies as risk managers, risk carriers and institutional investors, as well as the complex systems in which insurance companies operate. Accordingly, these frameworks should be prudent, effective and efficient, and should enable, not stifle, innovation. Over the years, ESG-related mandatory disclosure requirements have stemmed from different jurisdictions. At the same time, investors are increasingly calling for mandatory ESG-wide disclosure frameworks.

Systemic Risks, Systemic Challenges

In a highly competitive, highly fragmented and highly regulated insurance industry, tackling ESG factors to drive collective action and long-term solutions entails overcoming major challenges:

- Absence of insurance industry frameworks and methods enabling the systematic identification, analysis, management and monitoring of ESG factors in core insurance company strategies and operations;
- Absence of agreed insurance industry norms, standards, benchmarks and reporting on ESG factors;
- Absence of insurance industry platforms for common learning and to pool information and resources in addressing ESG factors; and
- Absence of substantial and reliable data and track records for ESG risks, which are often global, long-term and systemic in nature, hinders forward-looking risk assessments and the development of insurance products and services with positive ESG outcomes.

The Principles for Sustainable Insurance: Why They Make Sense

It is clear that the insurance industry—whose core business is to manage risk—must lead in understanding a rapidly changing risk landscape and address global ESG risks with rigour and innovation. By doing so, the insurance industry can help identify future challenges within the
financial system, mitigate systemic risks and avert crises, such as the potentially highly complex and profound “natural resources crisis” arising from the unsustainable use of a wide range of natural resources such as the climate, biodiversity ecosystems, and water. The scale of these risks is too big for any one institution to tackle and requires collective action and long-term solutions.

Decades of sustained profitability and capital growth have led to the evolution of large, influential and omnipresent insurers and reinsurers that have penetrated insurance markets worldwide and implanted themselves in the financial system and the broad economy. For these “universal risk carriers,” the negative externalities associated with many ESG factors (e.g., activities of insured companies and individuals that emit greenhouse gases and induce climate change; deforestation and destruction of habitats resulting in loss of ecosystem services; health issues and pandemics) have the potential to adversely affect both their underwriting profitability and investment returns in many territories and to threaten their long-term company value. Since many global ESG factors are inherently longer-term and pose systemic risks, then it could be in the best interests of universal risk carriers to quantify the costs of negative externalities linked to the ESG performance of their insureds. It can therefore be argued that these universal risk carriers must adopt a very long-term strategic perspective since sustainable value creation is largely dependent on the long-term health of markets and economies, and that it would be prudent for them to ensure proactive action on systemic ESG risks. This long-term strategic perspective for universal risk carriers is rooted to the “universal owner hypothesis” developed for large and highly diversified institutional investors who own a wide range of asset classes across sectors and markets. These investors effectively own a slice of the broad economy; hence the term, “universal owner.” The universal owner hypothesis has underpinned collaborative action by investors on ESG factors, including many of the world’s largest institutional investors that are signatories to the Principles for Responsible Investment. The concept of universal risk carriers could be a powerful incentive for long-term thinking and collective action on ESG factors within the insurance industry (and conceivably in conjunction with the investment industry) in order to tackle long-term and systemic ESG risks.

The recent global financial and economic crisis reinforced the necessity for the financial sector, including the insurance industry, to reassess fundamental thinking and practices and to more prudently and responsibly manage long-term and systemic risks, including those related to ESG factors.

To effectively promote and adopt ESG risk management and financing at the industry and global levels—and to accelerate collective action on ESG factors—UNEP Finance Initiative research\(^\text{135}\) has shown that the insurance industry should develop and adopt a set of Principles for Sustainable

\(^{135}\) See: ‘The global state of sustainable insurance – Understanding and integrating environmental, social and governance factors in insurance’ (2009), UNEP FI Insurance Working Group
Insurance focused on ESG factors, tailored to the insurance business, grounded on risks and opportunities, and in line with the goals of sustainable development.

The dynamic characteristics of ESG risks need an equally dynamic framework for the insurance industry to systematically identify, analyze, manage and monitor the evolution and impact of current and emerging ESG risks and to bridge the gap where regulatory or legal frameworks are underdeveloped by guiding an industry-led response to many global ESG risks. The Principles for Sustainable Insurance can respond to this need in a proactive way, acting as the global sustainability framework that can guide the industry toward best practice, pool information and resources, inform regulators and policy-makers, create a global sustainability forum for the industry and its many stakeholders, foster inclusiveness across markets, drive innovative solutions, and accelerate collective action.

The Principles for Sustainable Insurance can be designed in such a way that they are complementary to and aligned with the existing United Nations-backed Principles for Responsible Investment, and can complete a truly holistic global sustainability framework for the insurance industry. Investor signatories (e.g., insurance companies, pension funds, sovereign wealth funds, mutual funds, investment managers) to the Principles for Responsible Investment seek better long-term investment returns and sustainable markets through better analysis of ESG factors in their investment process and their exercise of responsible ownership practices. For insurance companies, by enhancing value creation through the systematic integration of ESG factors into their insurance and investment activities, they can potentially enhance long-term, sustainable company value from the perspective of investors as well.

Overall, the Principles for Sustainable Insurance Will:

1. Provide the global best practice framework to facilitate the systematic identification, analysis, management and monitoring of ESG risks and opportunities in core insurance company strategies and operations;
2. Contribute to more prudent, responsible and sustainable insurance thinking and practices that can reduce risks, create new opportunities and markets, and enhance financial returns, business performance and long-term company value;
3. Harness the insurance industry’s unique and immense capacity to tackle ESG factors as risk managers, risk carriers and institutional investors;
4. Contribute to more stable, resilient, responsible and sustainable insurance and financial markets through holistic and systemic risk management approaches and increased transparency;
5. Accelerate the transformational process to a resource-efficient, low-carbon, inclusive and sustainable global economy; and

The Principles for Sustainable Insurance and Solvency II:
Voluntary Complementing Mandatory

The initiative to develop Principles for Sustainable Insurance (PSI) is aligned with the underlying principles of Solvency II, which entail holistic risk management, total balance sheet and forward-looking approaches.

The PSI Initiative will encompass not only the insurance (liability) side of insurance company operations, but also the investment management (asset) side. On investment management, the PSI will integrate the framework afforded by the Principles for Responsible Investment (PRI). Taken together, the PSI and PRI will create a holistic global sustainability framework for the insurance industry, addressing ESG risks and opportunities stemming from both the asset and liability sides of an insurer’s balance sheet. Indeed, the PRI is increasingly being adopted within the insurance investment management industry. As of May 2010, the PRI signatory base of more than 740 institutions included 49 “insurance-affiliated entities” (i.e., entities that are part of an insurance-focused group, or part of a financial services group providing insurance products and services), representing nearly US$4 trillion in assets under management.

The PSI Initiative also aims to develop an annual reporting and assessment mechanism that will monitor and evaluate the progress of signatories (risk carriers, intermediaries and service providers) in implementing the Principles. Equally, this will act as an accountability, integrity and transparency mechanism for the Initiative, as a learning tool to identify best practices and areas of improvement, and as the global standard for ESG reporting by insurance companies. Again, this is consistent with the risk reporting, disclosure and transparency requirements of Solvency II.

Clearly, the PSI Initiative can become a highly effective complement to Solvency II in bolstering the long-term economic health, resiliency, stability and sustainability of the insurance industry and the financial system. The PSI-Solvency II link could be a model for how voluntary sustainable finance initiatives and prudential regulatory frameworks on financial stability can be mutually reinforcing.
Part 4
Rewiring the System

At least 932 financial institutions now support United Nations-backed principles and statements that advocate firm steps toward a sustainable financial system and a responsible approach to investment. The various documents supporting these principles and statements of commitment were drafted and agreed by financial and investment institutions in several UN-facilitated initiatives from the early 1990s onwards. Furthermore, legal interpretation and technical analysis generated by the initiatives have deepened the business case for a sustainable approach to finance and investment.

These commitments were developed by financial and investment institutions in collective efforts to better align the broad policies and practices of the banking, insurance and investment institutions with a range of societal, environmental and governance goals. In 1992 banks recognized “sustainable development depends upon a positive interaction between economic and social development, and environmental protection, to balance the interests of this and future generations” (see Appendix 3). In 1995 the insurance industry stated “that economic development needs to be compatible with human welfare and a healthy environment. To ignore this is to risk increasing social, environmental and financial costs” (see Appendix 4).

In 2002, ahead of the World Summit for Sustainable Development (WSSD) in South Africa, the financial services community recognized that there was a need to “raise awareness of key players in the financial markets, including analysts and financial rating agencies, toward financial risks related to non-sustainable behaviour in order to encourage them to integrate sustainability criteria in their evaluation process” (see Appendix 5).

136 In May 2010, 190 banks, insurers and investment organizations were signatories to the UNEP FI (www.unepfi.org) and a further 742 investment organizations, including service organizations, support the UN-backed Principles for Responsible Investment (www.unpri.org). Also, 380 financial organizations are signatories to the United Nations Global Compact. There is some overlap with respect to organizations adhering to more than one of the initiatives named.
139 The UNEP Statement by Financial Institutions on the Environment and Sustainable Development was signed initially by 28 banks that gathered for a UN-convened meeting in New York on 28 May 1992.
140 The UNEP Statement of Environmental Commitment by the Insurance Industry was first signed by a group of insurance and reinsurance companies at a meeting in Germany in 1995.
By April 2006 the institutional investment community was more explicit when it stated:

As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social, and corporate governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognise that applying these Principles may better align investors with broader objectives of society.¹⁴²

The sentiment of these three statements—in essence, recognizing the need for finance and investment to take a broader economic, social and environmental view—has been echoed post crisis by senior financial policy-makers. The Chairman of the UK’s Financial Services Authority (FSA) called for the sector “to reflect deeply on their role in the economy, and to recommit to a focus on their essential social and economic functions, if they are to regain public trust.”¹⁴³ The President of the European Central Bank urged “finance to come back to basics” where profitable business is justified because it mirrors the “social value of the intermediation function.”¹⁴⁴

The language of sustainable finance and responsible investment, where accountability, transparency, disclosure, long-termism and responsibility are the common currency, reappears repeatedly in the analyses of the crisis by policy-makers, academics and industry bodies and in much of the new thinking presented as a response to the institutional and functional flaws of the financial system exposed by the crash.

Clearly, along the investment chain and throughout the processes of financial intermediation individual institutions, although operating legally and rationally in their own self interests, did not take full account of their voluntary commitments to sustainable finance and responsible investment in all of their daily operations. As such, a period of honest self-examination is required across the board for those institutions working with the United Nations in the areas of sustainable finance and responsible investment.

Equally, it is clear that the financial policy-making and supervisory communities have come to understand how gaps in both international and domestic financial system governance, the pace of financial innovation outstripping the capacity of regulation to keep ahead of new risk promoting products, and regulatory authorities missing the buildup of systemic risk from supposedly risk diversifying securitization of uncorrelated assets, contributed to the severity of the financial crisis.

¹⁴² The UN Principles for Responsible Investment were initially signed in April/May 2006 by 53 institutional investment organizations collectively representing US$4 trillion in assets.
¹⁴⁴ Keynote speech by Jean-Claude Trichet, President, European Central Bank, at the 9th Munich Economic Summit, 29 April 2010.
Market Governance

- Where and how can the goals and aspirations of sustainable finance and responsible investment bolster the new regulatory and supervisory frameworks that are being developed?
- How can we work with financial policy-makers, regulators and supervisory bodies to ensure deeper integration of emerging systemic risk considerations into the new mechanisms forged for financial system stability and resilience?
- How can we collectively ensure greater accountability amongst institutions along the investment chain and throughout the economically and socially critical processes of financial intermediation?
- How can financial services foster a sea change in the quality, speed and coverage of ESG disclosure by requiring comprehensive ESG disclosure and reporting?
- How can rejuvenated self regulation and voluntary activity support the overhauled regulatory framework and contribute to strengthened market governance?

Institutional Governance

- How can we make accountability, transparency, disclosure, responsibility and long-termism an integral part of our activities across all policies and mainstream business areas?
- How can the financial services sector contribute to the accelerated development of an integrated international reporting standard that enables comparability between companies regarding ESG performance?
- Where clear conflicts of interest exist within and between financial institutions, how can financial institutions act collectively to deal with these issues?

Collaborative Action

- How can we accelerate the proliferation of sustainable finance and responsible investment thinking and action along the entire investment chain from end beneficiaries to investee targets?
- How can we ensure relevant, focused and timely research?
- How can more of the valuable research and analysis undertaken by financial services and investment around new systemic risk issues, such as climate change, resource scarcity, and threats to biodiversity and ecosystems services, be accelerated into the processes of policy formulation geared to financial stability and resilience?
- How can the sector work to support the evolution and growth of financial service institutions which—through the market—serve broader environmental and social missions including cooperative activities that address financial exclusion, as well as microfinance,
microcredit and microinsurance services that support financial activity for the base of the pyramid?

**Going Forward**

Clearly, a deeper exploration of the links between financial stability and sustainability in the finance and investment sector is required. With this document, UNEP FI hopes to catalyze a global consultation that will contribute to that process and both add to our collective understanding of the issues but, also, will highlight some of the contradictions and conflicts that exist between voluntary commitments to sustainability and the actual actions of institutions in the market-place. For these contradictions and conflicts clearly exist. A drop-down menu of the crisis issues that the financial services sector should put through a thorough “sustainability screen” would, amongst others, include the following:

**The Crash:**
- Failure of systemic governance
- Political and policy failures
- Supervisory failures
- Institutional failures

**Problems along the investment chain and in financial intermediation:**
- Short-termism
- Moral hazard\(^{145}\)
- Misaligned incentives
- Conflicts of interest

**Corrosion of financial foundations:**
- Breakdown of Trust
- Failures of accountability
- Failures of responsibility
- Failures of fiduciary duty

**Results:**
- Economic slow down
- Uncertainty
- Unpredictability
- Volatility

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\(^{145}\) John Authers described “moral hazard” as “the belief that there was no penalty for undue risks,” in J. Authers, 2010, “Market forces,” *Financial Times*, FT weekend Sat. 22/Sun. 23 May.
• Scope for speculation

Responses:
• Political response
• Regulatory overhaul
• Investor backlash
• Client backlash
• Litigative upsurge

New thinking for functional and institutional change:
• Vertical regulation
• Responsible investment
• A new ecology of finance
• Long finance

Recommendations

Toward a deeper understanding of the links between financial stability and sustainable finance and responsible investment and, also, to align the thinking and action in the two fields, UNEP FI and IISD make the following initial recommendations:

• UNEP FI proposes the creation of a joint working group between the BCBS and the leading global sustainable finance and responsible investment initiatives. The group would explore the relevance of both short- and long-term ESG issues to the macro prudential and micro prudential environment and the mid- to long-term work of BCBS;

• UNEP FI recommends that the initiative’s proposals of January 2003, namely to convene a joint working group between CRAs and UNEP FI to explore the acceleration of financially material ESG risks into credit assessment processes and CRA mechanisms relevant to the sound running of the capital and financial marketplaces, should be enacted;

• The forthcoming Principles for Sustainable Insurance (PSI) (Appendix 4), to be drafted by the industry in a United Nations supported process in 2011, explicitly factor in the links between international insurance regulation and supervision with the critical role of the sector to underpin the stability, resilience and sustainability of the financial system;

• An international on-line Forum is created to ensure that high level financial policy-makers (G-20, FSB, BCBS) are made aware of both the Accounting for Sustainability\(^{146}\) work to

\(^{146}\) Accounting for Sustainability is an initiative of the Prince of Wales. For more, see http://www.princeofwales.gov.uk/mediacentre/pressreleases/the_prince_s_accounting_for_sustainability_project_695809414.html.
create an Integrated International Reporting Standard and are kept informed about the work underway in the United Nation’s Sustainable Stock Exchanges initiative to promote the inclusion of ESG factors on a “comply or explain” basis into the listing requirements of top 50 Stock Exchanges worldwide;

• Under the Green Economy and International Environmental Governance themes of the May 2012 United Nations Rio+20 Summit, a series of special international sessions of high level financial policy-makers, leading financiers and investors and other relevant actors, are convened to report on the advances made by the international community in the recommendations made above and to frame a pathway for future collaborative action to ensure the stability, resilience and sustainability agendas are effectively aligned and associated policy and market actions are integrated into the deliberations of all relevant bodies at the international, regional and national levels; and

• Developments in the work proposed above and systemically important actions stemming from it are reported on an annual basis to the General Assembly of the United Nations and via that body to the G-20 Finance Ministers.

Final Word

Such actions may, in time, help to gently redirect the relationship between “financial capacity” and “political perspicacity” captured by the late economist John K. Galbraith in his exploration of the causes and impacts of The Great Crash of 1929. The US economist’s concluding words in his iconic 1954 script are as relevant to the crash of 2007-2008 as they were to that of 1929 and also cut to the heart of the relationship between stability, resilience and more balanced economic, environmental and social development that are central to the United Nation’s mission.

The thought that this seemingly cast iron relationship might be diluted, redirected or reversed in any way would bring a wry smile to the academic’s face but he would agree, perhaps, that it was worth trying:

But now, as throughout history, financial capacity and political perspicacity are inversely correlated. Long-run salvation by men of business has never been highly regarded if it means disturbances of orderly life and convenience in the present. So inaction will be advocated in the present even though it means deep trouble in the future. Here, at least equally with communism, lies the threat to capitalism. It is what causes men who know that things are going quite wrong to say that things are fundamentally sound.147

Appendix 1
The Current Consultation Process of the Basel Committee on Banking Supervision to Strengthen the Resilience of the Banking Sector

Under the direction of the broader G-20 and Financial Stability Board work, the Basel Committee on Banking Supervision (BCBS) current consultations are to:

- Strengthen the resilience of the banking sector; and
- Provide an international framework for liquidity risk measurement, standards and monitoring.

More specifically, the BCBS is working to strengthen capital requirements for banks and to develop counter-cyclical macro prudential regulation to offset the pro-cyclical nature of the financial sector to encourage stability and reduce volatility. The BCBS Consultative Document, “Strengthening the Resilience of the Banking Sector,” published in December 2009, outlined five key goals: The regulatory adjustments proposed are:

1. Improve quality, consistency and transparency of the capital base;
2. Risk coverage of the capital framework will be strengthened; to determine capital requirements using stress inputs;
3. Leverage ratio to be introduced as a supplementary measure to BS-II risk based framework;
4. Building of capital buffers for bad times; and
5. Global minimum liquidity standard.

1. The 80-page Consultative Document, which was open for comments until 16 April 2010, looks at:
   a. **Capital base:** Raising the quality, consistency and transparency of the capital base through stricter rules on eligibility of instruments;
   b. **Risk coverage:** Enhancing risk coverage through “strengthening” counterparty credit risk capital requirements;
   c. **Leverage ratio:** Supplemented risk-based capital requirements with a non-risk-based leverage ratio;

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d. **Countercyclical capital buffers:** Reducing pro-cyclicality and promoting countercyclical capital buffers through a combination of forward-looking provisioning and capital buffers; and

e. **Systemic risk:** Addressing systemic risk and interconnectedness (specific proposals to be developed in the first half of 2010).

2. **Liquidity standards ("Liquidity Paper") looks at:**
   
f. **Liquidity Coverage Ratio (LCR):** The LCR requires banks to have enough cash (or cash equivalent securities) to meet net cash outflows over a short (30 day) period of acute stress; and

g. **Net Stable Funding Ratio (NSFR):** The NSFR requires banks to have capital and/or longer-term, high-quality funding that can support operations over a longer (one year) period of less severe stress.

3. **The proposed consultation to implementation schedule:**
   
h. Consultation until 16 April 2010;
   
i. Comprehensive Impact Assessment during the first half of 2010;
   
j. Development of a fully calibrated set of standards by end 2010; and
   
k. Implementation expected by end 2012 (or later awaiting recovery of financial institutions and the economy becomes certain).

A note on Basel and Credit Default Swaps (CDS):

Under the Basel II capital accords, large banks and investment banks could significantly decrease their regulatory capital by relying on “credit risk mitigants,” including CDS positions on existing exposures. U.S. standards under the Advanced Capital Adequacy Framework, though more conservative on this matter than Basel II implementation elsewhere, also allows for some reduction of regulatory capital when a bank purchases CDS protection from an eligible entity. So, a bank can essentially rent another institution’s credit rating to reduce its required capital. The proposed reforms in the USA do not explicitly restrict the use of CSD for capital reduction. Nor do the reforms suggest that only CDS subject to collateral requirements could be allowed to provide capital relief, or a bank’s exposure to particular CDS protection sellers could be limited. Similarly, commentators are pointing out that the use of CDS to lower underwriting standards is not adequately targeted. It is certainly the case that investment banks and other packagers of mortgages could use CDS protection to reduce their efforts in analyzing the risk that due diligence would otherwise require. The crisis certainly showed the disastrous effects of investors and underwriters relying far too heavily on this protection and there is concern that adequate rules for reporting are not being proposed to help regulators address these risks in a robust manner. In contrast, in the EU, the aforementioned Directives propose a host of restrictions but with little attention to how they
might be monitored and enforced.

Another point of concern is that the US “Dodd’s Bill” originally proposed no exemption for corporate end-users—trading or clearing for CDS products, though this provision was substantially water down by industry lobbies. According to the Commodities Futures Trading Commission, 95 per cent of CDS trade in the USA is between financial institutions—hence the rationale to avoid exemptions. In reverse, in Europe, the Commission recognizes the need to provide for ‘bespoke’ products that cannot be standardized and to provide for non-financial institutions that are of low systemic risk.

The play out of these reforms will also be effective by the many quasi-legal instruments under preparation. For example, The Committee on Payment and Settlement Systems and the International Organisation of Securities Commissions (CPSS-IOSCO) are reviewing the existing standards for central clearing platforms (CCP) in order to better address risks associated with clearing OTC derivatives. The International Swaps and Derivatives Association published in April and July 2009 two supplements to its 2003 Credit Derivatives Definitions (the “Big Bang” and “Small Bang” protocols), which adopted the cash settled auction mechanism globally to settle most types of CDS contracts following a credit event and introduced standardized coupons. The objective is to facilitate the move of the CDS market to CCP clearing.
Appendix 2
The Principles for Responsible Investment

As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that ESG issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognise that applying these Principles may better align investors with broader objectives of society. Therefore, where consistent with our fiduciary responsibilities, we commit to the following:

1. We will incorporate ESG issues into investment analysis and decision-making processes.

   **Possible actions:**
   - Address ESG issues in investment policy statements
   - Support development of ESG-related tools, metrics, and analyses
   - Assess the capabilities of internal investment managers to incorporate ESG issues
   - Assess the capabilities of external investment managers to incorporate ESG issues
   - Ask investment service providers (such as financial analysts, consultants, brokers, research firms, or rating companies) to integrate ESG factors into evolving research and analysis
   - Encourage academic and other research on this theme
   - Advocate ESG training for investment professionals

2. We will be active owners and incorporate ESG issues into our ownership policies and practices.

   **Possible actions:**
   - Develop and disclose an active ownership policy consistent with the Principles
   - Exercise voting rights or monitor compliance with voting policy (if outsourced)
   - Develop an engagement capability (either directly or through outsourcing)
   - Participate in the development of policy, regulation, and standard setting (such as promoting and protecting shareholder rights)
   - File shareholder resolutions consistent with long-term ESG considerations
   - Engage with companies on ESG issues
   - Participate in collaborative engagement initiatives
   - Ask investment managers to undertake and report on ESG-related engagement
3. We will seek appropriate disclosure on ESG issues by the entities in which we invest.

Possible actions:
- Ask for standardised reporting on ESG issues (using tools such as the Global Reporting Initiative)
- Ask for ESG issues to be integrated within annual financial reports
- Ask for information from companies regarding adoption of/adherence to relevant norms, standards, codes of conduct or international initiatives (such as the UN Global Compact)
- Support shareholder initiatives and resolutions promoting ESG disclosure

4. We will promote acceptance and implementation of the Principles within the investment industry.

Possible actions:
- Include Principles-related requirements in requests for proposals (RFPs)
- Align investment mandates, monitoring procedures, performance indicators and incentive structures accordingly (for example, ensure investment management processes reflect long-term time horizons when appropriate)
- Communicate ESG expectations to investment service providers
- Revisit relationships with service providers that fail to meet ESG expectations
- Support the development of tools for benchmarking ESG integration
- Support regulatory or policy developments that enable implementation of the Principles

5. We will work together to enhance our effectiveness in implementing the Principles.

Possible actions:
- Support/participate in networks and information platforms to share tools, pool resources, and make use of investor reporting as a source of learning
- Collectively address relevant emerging issues
- Develop or support appropriate collaborative initiatives

6. We will each report on our activities and progress towards implementing the Principles.
Possible actions:

- Disclose how ESG issues are integrated within investment practices
- Disclose active ownership activities (voting, engagement, and/or policy dialogue)
- Disclose what is required from service providers in relation to the Principles
- Communicate with beneficiaries about ESG issues and the Principles
- Report on progress and/or achievements relating to the Principles using a “Comply or Explain”\textsuperscript{149} approach
- Seek to determine the impact of the Principles
- Make use of reporting to raise awareness among a broader group of stakeholders

The Principles for Responsible Investment were developed by an international group of institutional investors reflecting the increasing relevance of environmental, social and corporate governance issues to investment practices. The process was convened by the United Nations Secretary-General.

In signing the Principles, we as investors publicly commit to adopt and implement them, where consistent with our fiduciary responsibilities. We also commit to evaluate the effectiveness and improve the content of the Principles over time. We believe this will improve our ability to meet commitments to beneficiaries as well as better align our investment activities with the broader interests of society.

We encourage other investors to adopt the Principles.

\textsuperscript{149} The Comply or Explain approach requires signatories to report on how they implement the Principles, or provide an explanation where they do not comply with them.
Appendix 3
UNEP Statement by Financial Institutions on the Environment & Sustainable Development

1. Commitment to Sustainable Development
   1.1 We regard sustainable development as a fundamental aspect of sound business management.
   1.2 Believe that sustainable development can best be achieved by allowing markets to work within an appropriate framework of cost-efficient regulations and economic instruments. Governments in all countries have a leadership role in establishing and enforcing long-term common environmental priorities and values.
   1.3 We regard the financial services sector as an important contributor towards sustainable development, in association with other economic sectors.
   1.4 We recognize that sustainable development is a corporate commitment and an integral part of our pursuit of good corporate citizenship.

2. Environmental Management and Financial Institutions
   2.1 We support the precautionary approach to environmental management, which strives to anticipate and prevent potential environmental degradation.
   2.2 We are committed to complying with local, national, and international environmental regulations applicable to our operations and business services. We will work towards integrating environmental considerations into our operations, asset management, and other business decisions, in all markets.
   2.3 We recognize that identifying and quantifying environmental risks should be part of the normal process of risk assessment and management, both in domestic and international operations. With regard to our customers, we regard compliance with applicable environmental regulations and the use of sound environmental practices as important factors in demonstrating effective corporate management.
   2.4 We will endeavor to pursue the best practice in environmental management, including energy efficiency, recycling and waste reduction. We will seek to form business relations with partners, suppliers, and subcontractors who follow similarly high environmental standards.
   2.5 We intend to update our practices periodically to incorporate relevant developments in environmental management. We encourage the industry to undertake research in these and related areas.
   2.6 We recognize the need to conduct internal environmental reviews on a periodic basis, and to measure our activities against our environmental goals.
2.7 We encourage the financial services sector to develop products and services which will promote environmental protection.

3. Public Awareness and Communication
   3.1 We recommend that financial institutions develop and publish a statement of their environmental policy and periodically report on the steps they have taken to promote integration of environmental considerations into their operations.
   3.2 We will share information with customers, as appropriate, so that they may strengthen their own capacity to reduce environmental risk and promote sustainable development.
   3.3 We will foster openness and dialogue relating to environmental matters with relevant audiences, including shareholders, employees, customers, governments, and the public.
   3.4 We ask the United Nations Environment Programme (UNEP) to assist the industry to further the principles and goals of this Statement by providing, within its capacity, relevant information relating to sustainable development.
   3.5 We will encourage other financial institutions to support this Statement. We are committed to share with them our experiences and knowledge in order to extend best practices.
   3.6 We will work with UNEP periodically to review the success in implementing this Statement and will revise it as appropriate.

We, the undersigned, endorse the principles set forth in the above statement and will endeavor to ensure that our policies and business actions promote the consideration of the environment and sustainable development.
Appendix 4

UNEP Finance Initiative’s Statement of Environmental Commitment by the Insurance Industry

Preamble

The insurance industry recognizes that economic development needs to be compatible with human welfare and a healthy environment. To ignore this is to risk increasing social, environmental and financial costs. Our Industry plays an important role in managing and reducing environmental risk, in conjunction with governments, individuals and organizations. We are committed to work together to address key issues such as pollution reduction, the efficient use of resources, and climate change. We endeavor to identify realistic, sustainable solutions.

1. General Principles of Sustainable Development
   1.1 We regard sustainable development, defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs, as a fundamental aspect of sound business management.
   1.2 We believe that sustainable development is best achieved by allowing markets to work within an appropriate framework of cost efficient regulations and economic instruments. Government has a leadership role in establishing and enforcing long-term priorities and values.
   1.3 We regard a strong, proactive insurance industry as an important contributor to sustainable development, through its interaction with other economic sectors and consumers.
   1.4 We believe that the existing skills and techniques of our industry in understanding uncertainty, identifying and quantifying risk, and responding to risk, are core strengths in managing environmental problems.
   1.5 We recognize the precautionary principle, in that it is not possible to quantify some concerns sufficiently, nor indeed to reconcile all impacts in purely financial terms. Research is needed to reduce uncertainty but cannot eliminate it entirely.

2. Environmental Management
   2.1 We will reinforce the attention given to environmental risks in our core activities. These activities include risk management, loss prevention, product design, claims handling and asset management.
   2.2 We are committed to manage internal operations and physical assets under our control in a manner that reflects environmental considerations.
2.3 We will periodically review our management practices, to integrate relevant developments of environmental management in our planning, marketing, employee communications and training as well as our other core activities.

2.4 We encourage research in these and related issues. Responses to environmental issues can vary in effectiveness and cost. We encourage research that identifies creative and effective solutions.

2.5 We support insurance products and services that promote sound environmental practice through measures such as loss prevention and contract terms and conditions. While satisfying requirements for security and profitability, we will seek to include environmental considerations in our asset management.

2.6 We will conduct regular internal environmental reviews, and will seek to create measurable environmental goals and standards.

2.7 We shall comply with all applicable local, national and international environmental regulations. Beyond compliance, we will strive to develop and adopt best practices in environmental management. We will support our clients, partners and suppliers to do likewise.

3. Public Awareness and Communications

3.1 Bearing in mind commercial confidence, we are committed to share relevant information with our stakeholders, including clients, intermediaries, shareholders, employees and regulators. By doing so we will improve society’s response to environmental challenges.

3.2 Through dialogue with public authorities and other bodies we aim to contribute to the creation of a more effective framework for sustainable development.

3.3 We will work with the United Nations Environment Programme to further the principles and goals of this Statement, and look for UNEP’s active support.

3.4 We will encourage other insurance institutions to support this Statement. We are committed to share with them our experiences and knowledge in order to extend best practices.

3.5 We will actively communicate our environmental activities to the public, review the success of this Statement periodically, and we expect all signatories to make real progress.
Appendix 5
Recommendations from UNEP Finance Initiative

Presented to the World Summit for Sustainable Development (WSSD), Johannesburg, South Africa, 2002

The following statement has been prepared and approved by those 295 financial institutions who are supporters of the United Nations Environment Programme Finance Initiative (UNEP FI). For full details on UNEP FI, see www.unepfi.net.

**Promoting a sustainability dynamic in the financial system.**

Action by UNEP Finance Initiatives

The UNEP Finance Initiative (FI) will seek to promote further amongst its members:

1. Linking of the core competencies of the financial sector to the sustainable development agenda.
2. Increased use of sustainability criteria when investing and lending, thus promoting companies that are conducting or seeking to conduct their business in conformity with sustainability criteria. The use of such sustainability criteria should be included in investments in listed bonds and equities, and in lending for unlisted companies.
3. Annual reporting of members progress in implementation of environmental management systems and corporate social responsibility activities.
4. For those members with international retail operations, increased access of underserved people (poor) and countries (out of capital flows) to financial services as a supplementary means to fulfill unmet social and economic development needs in developing countries. Promising examples could include microfinance products and appropriate information technologies which support up take of financial services by the poor.
5. Raise awareness of key players in the financial markets, including analysts and financial rating agencies, towards financial risks related to non-sustainable behavior in order to encourage them to integrate sustainability criteria in their evaluation process.

**UNEP FI Recommendations to WSSD**

UNEP FI recommends that the UN World Summit for Sustainable Development adopts the following recommendations, so that banks, insurers and funds managers can better implement our shared goals for sustainable development:
1. Capital markets in developed economies need to be stimulated to invest more in small and medium-sized businesses in developing economies. This requires:
   a. more technical assistance for small and medium-sized businesses in developing economies,
   b. sovereign risk reduction instruments for investors,
   c. the creation of public and private funds and mechanisms that will facilitate private equity and listed equity investments in developing countries.

2. Promote a sound investment climate to support the confidence of investors. A sound investment climate includes a broad variety of aspects such as protection of property rights, contract enforcement, control of corruption, stability-oriented macroeconomic policies, sound financial regulation and supervision, and financial transparency. Furthermore, it should also incorporate environmental and social regulations to ensure that investments contribute to sustainable long-term growth. In developed and emerging economies, review and reform the tax, tariff and finance regulatory structures that have impeded environmentally and socially sound investment.

3. Promote internalization of true environmental costs, including greenhouse gas emissions and climate change risks, into accounting principles and practices, thereby recognizing these risks as potential business liabilities.

4. Promote the creation of insurance and other financial products in developing countries which are structured to cover natural and man-made risks and thereby to introduce mechanisms and behaviors for risk avoidance, control, and reduction. Such products and mechanisms should provide additional support to public sector regulatory and planning approaches fashioned to mitigate the impacts of natural and man-made disasters.

5. Promote transparency and responsibility in:
   a. Official Development Assistance (ODA) particularly as regards job creation, income creation, and improvement in living, working and environmental conditions and
   b. Foreign Direct Investment (FDI), particularly as regards reinvestment of profits in the local economies, job creation, income creation, and improvement of living, working and environmental conditions in the local economies which will make both ODA and FDI more legitimate and effective. Explore mechanisms to create innovative and integrated ODA-FDI financing mechanisms that leverage greater sustainability benefits. The strengthening of NGOs, media, local government and overall institutional capacity will
enhance the transparency around and benefits stemming from FDI and ODA

6. Use debt relief mechanisms that are environmentally and socially beneficial, and improve the investment climate thereby reducing vulnerabilities and creating new opportunities.

- Significant elements of this statement were drawn from two earlier UNEP FI documents generated at the 2002 UNEP FI Global Roundtable in Rio de Janeiro, Brazil (March 14-15). These documents were first outlined publicly during a UNEP FI Panel event at the UN Financing for Development Conference (UNFfD), Monterrey, Mexico, on 18 March, 2002. The final statement results from a rigorous UNEP FI member companies’ consultation process implemented during the period April–end July 2002.
Appendix 6
An Overview of the Ongoing Reforms in the Financial Sector (as of 27 May 2010)

Under the auspices for the G-20 commitments to financial sector reforms, the Basel Committee on Banking Supervision (BCBS) is formulating proposals on globally relevant rules to increase transparency, stability and accountability in across the financial sector. These reforms are to be completed by the end of 2010 and implemented by the end of 2012. Based on the current schedule of the BCBS, the reforms are to be ready for voting in November 2010.

In tandem, the European Union and the United States are overhauling oversight and regulation of their domestic financial sectors. (This is not to say that other jurisdictions are not working on banking and trading reforms, but for reasons of time and budgetary constraints, they are not included in this study).

The broad details of these ongoing reforms are captured in the tables below. Table 1 provides an overview of the overarching sector-wide reforms while Table 2 looks specifically at reforms to bring transparency and accountability across derivative markets.

These reforms are giving rise to an unprecedented debate on the “social value” of many elements of financial services, how these reforms align and differentiate across jurisdictions and if indeed these reforms alone will bring systemic stability—a prerequisite for factoring environmental, social and governance (ESG) indicators into financial services.

The final outcomes of the proposed reforms are not yet certain but there are some areas on which these reforms appear to fall short. Firstly, in providing for the dismantling on large financial institutions, the reforms do not address the core issue of how institutions can be prevented from becoming too big to fail in the first place. There is also concern that these large institutions will have an unfair competitive advantage simply by the fact that the law provides for them of fail. Reforms hence need to include caps on deposits and capital that large institutions can hold to prevent them from becoming large enough to impact the stability of the global financial system. Next, there is the issue that certain customized derivatives are will be exempt from trading on exchanges and regulators can use their discretion to determine what these contracts might be. Customized contracts were at the heart of the financial crisis and reforms need to require that these contracts are at the very least reported (to a trade repository) and subject to central clearing. (The EU reforms appear to be moving in this direction). Reforms also do not require banks to separate out commercial banking activities from investment banking activities. This calls for the re-enactment of the Glass-Steagall
Act, (1933-1999 USA) that prohibited commercial banks from collaborating with full-service brokerage firms or participating in investment banking activities.

<table>
<thead>
<tr>
<th>Restrictions on the Size and Activity of Institutions</th>
<th>USA</th>
<th>EU</th>
<th>UK</th>
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<tr>
<td><strong>The Volker plan</strong></td>
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<td>• Deposit-taking banks will not be allowed to own, invest or sponsor hedge funds, private equity funds or proprietary trading operations for their own profit unrelated to serving their customers</td>
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<td>• It also limits the liabilities that large banks can hold</td>
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<tr>
<td>• No bank holding company may possess non-deposit liabilities exceeding 3 per cent of the annual gross domestic product of the United States</td>
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<td><strong>Comments:</strong> The US Administration has called for a global agreement on the bank plan but it looks unlikely that the EU will adopt similar measures (Reuters). This immediately exposes a huge gap in the policy and allows for regulatory arbitrage where banks will simply migrate to those jurisdictions where the regulation is lax.</td>
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**Creation of Oversight Authority**

<table>
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<tr>
<th><strong>The Financial Services Oversight Council (FSOC)</strong></th>
<th>Draft legislation on the new structure of supervision was approved by finance ministers in December 2009.</th>
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<tbody>
<tr>
<td>• The Secretary of the Treasury will chair this new body with the participation of all the chairs of the relevant supervisory authorities</td>
<td>Two new authorities were established:</td>
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<tr>
<td>• Will have the authority to impose stricter prudential rules and to break up financial firms to prevent from being “too big to fail”</td>
<td>1. European Systemic Risk Board (ESRB), set up under the auspices of the European Central Bank and chaired by its president. It is mandated to:</td>
</tr>
<tr>
<td>• The house act will curtail the power to provide emergency lending, which can only occur upon written determination of the Council and after written consent of the Secretary of the Treasury</td>
<td>• Gather information on all macro prudential risk at the EU level, to assess and prevent potential risks to financial stability in the EU properly and swiftly</td>
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<tr>
<td><strong>Consumer Financial Protection Agency</strong></td>
<td>• Monitor macro and micro information and issue risk warnings on which there would be mandatory follow-up and monitoring by EU supervisors</td>
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<tr>
<td>• Independent entity dedicated to consumer protection in credit, savings and payments markets</td>
<td>• Work closely with the IMF, FS and the G-20 at the global level.</td>
</tr>
<tr>
<td>• Authority and accountability to make sure that consumer protection regulations are written fairly and enforced vigorously</td>
<td><strong>National Bank Supervisor</strong></td>
</tr>
<tr>
<td>• The European System of Financial Supervisors (ESFS), which comprises</td>
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150 the Fed, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, the future Consumer Financial Protection Agency, the Securities and Exchange Commission, the Commodity and Futures Trading Commission, the Federal Deposit Insurance Corporation and the federal Housing Finance Agency
### Table 1
Overview of proposed reforms across the financial sector in the USA, EU and the UK

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<tr>
<th>USA</th>
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<tr>
<td>• Single agency with separate status in the treasury with responsibility for federally chartered depository institutions</td>
<td>three functional authorities: the European Banking Authority; the European Securities Authority; and the European Insurance Authority. These Authorities will have the following mandates: (i) legally binding mediation between national supervisors; (ii) adoption of binding supervisory standards; (iii) adoption of binding technical decisions applicable to individual institutions; (iv) oversight and coordination of colleges of supervisors; (v) licensing and supervision of specific EU-wide institutions (e.g., Credit Rating Agencies and post trading infrastructures); (vi) binding cooperation with the ESRC to ensure adequate prudential supervision; and (vii) strong coordinating role in crisis situations</td>
<td>Comments: There are fundamental differences in opinion between the White House and the Congress plans. Furthermore, there is a third plan by Senator Christopher Dodd, attempting to find a middle ground between the White House and Congress. For example, the Dodd plan will strip supervisory oversight from the Federal Reserve and give greater authority and resources to the Securities and Exchange Commission.</td>
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<tr>
<td>Office of National Insurance within Treasury</td>
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<td>Comments: On the European Systemic Risk Board: The European Central Bank is now challenged to bring the European Systemic Risk Board (ESRB) into existence. The ESRB is likely to face significant conceptual and institutional challenges in how it carried out its core mandate, to define, identify and prioritize all macro-financial risks. Another potential difficulty could be the overlap of responsibility between the ECB and the ESRB on European monetary policy. It is hence important that the ESRB be set up a sufficiently detached institution of the ECB to avoid overall and conflict of interest. On the European System of Financial Supervisors (ESFS): Challenges are likely to arise in bringing about collaboration and the coordination between the three entities. Poor coordination is already a major obstacle in the oversight of the financial sector.</td>
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<tr>
<td>• To promote national coordination in the insurance sector</td>
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<td>Enhanced Capital Reserve Requirements The Basel Committee of Banking Supervision (BCBS), of which the USA, EU and UK are members, have proposed reforms on capital reserve requirements within the scope of the Basel II reforms. The public consultation period on the first draft proposal ended in April 2010.</td>
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Overview of proposed reforms across the financial sector in the USA, EU and the UK

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<tr>
<td>BCBS proposes the following reforms within scope of the proposed reforms of Basel II:</td>
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<td>• Increasing trading book capital</td>
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<td>• Expansion of risk capture</td>
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<tr>
<td>• Strengthening market discipline</td>
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The rationale behind the proposal to revise the minimum capital requirement is primarily connected to the observed “weaknesses” in governance and incentives within banking system during the crisis. Increasing capital requirements is seen as one of the instrument that would moderate the leveraging speed, improve the quality of capital (connected to liquidity requirements) and help mitigate the problem of procyclicality (connected to capital buffers—see bank bail out tax section below). The aim will be to adopt measures to raise the quality, consistency, and transparency of the regulatory capital base, in particular, strengthening that component of the Tier 1 capital base that is fully available to absorb losses on a going concern basis (connected to systemic). To this end, the predominant form of Tier 1 capital will have to be common shares and retained earnings. The proposal has also been endorsed by the Financial Stability Board and the G-20.

Comments on the proposed Basel II reforms:

• BCBS is of the view that management leveraged up in response to growing incentives, which in turn fuelled the short-term behaviour in financial markets.
• Deductions from capital and prudential filters have been harmonized internationally and generally applied at the level of common equity or its equivalent in the case of non-joint stock companies. The remainder of the Tier 1 capital base must be comprised of instruments that are subordinated, have fully discretionary non-cumulative dividends or coupons and have neither a maturity date nor an incentive to redeem. Innovative hybrid capital instruments with an incentive to redeem through features like step-up clauses, currently limited to 15 per cent of the Tier 1 capital base, will be phased out. The Committee will calibrate the minimum requirements for the overall level of capital, Tier 1 capital. In addition, Tier 2 capital instruments will be harmonized and so-called Tier 3 capital instruments, which were only available to cover market risks, eliminated. Finally, to improve market discipline, the transparency of the capital base will be improved, with all elements of capital required to be disclosed along with a detailed reconciliation to the reported accounts.

Comments on the content and implementation of Basel II:

• The 2005 Basel II covered modalities on the use of credit ratings for risk weightings in the external ratings based approach, and the use of internal models for more advanced financial institutions. Basel II also set a minimum capital requirement of 8 per cent for the banking book, but the differentiation of risk weightings prevented supervisors from noticing the growing degree of leverage in the financial system.
• The USA is yet to implement Basel II changes and has committed to do so by 2011, but only across the largest 20 or so institutions.
• Basel II was implemented in the US with the Capital Requirements Directive.

Accounting Standards
(A quasi-legal reform)

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<tr>
<td>Applies the US GAAP—Generally Accepted Accounting Principles.</td>
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<tr>
<td>Has adopted the International Financial Reporting Standards (IFRS)</td>
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Comments:
Banks operating under both the IFRS and the US GAAP point out that on some key elements of a bank’s balance sheet, IFRS and USGAAP are entirely incomparable. IFRS deals with gross exposures, while under GAAP, derivatives are represented at their net value, resulting in entirely different balance sheets, and presenting EU banks as being overleveraged.
<table>
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<tr>
<th><strong>USA</strong></th>
<th><strong>EU</strong></th>
<th><strong>UK</strong></th>
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</table>
| **Bank Bailout tax** | • A tax on banks to help finance future bailouts and to recover the cost of past bailouts of the current crisis  
• The proposed 0.15 per cent tax would last at least 10 years and generate about $90 billion over the decade, according to administration estimates  
• It would apply to about 50 of the biggest banks, those with more than $50 billion in assets, and include many institutions that accepted no money from the $700 billion financial industry bailout | • Also known as the Stability Fund in Germany  
• France and Germany held joint talks to draw the details for the Stability Fund  
• Berlin expects that the levy will raise 1 billion to 1.2 billion euros ($1.35 billion to $1.62 billion) a year  
• Levies would be adjusted according to each bank’s risk profile to ensure that the policy works to counter speculative activity by banks | • The UK’s Conservative Party leader, David Cameron, has said he will impose a tax on banks if he is voted this year and Gordon Brown too has backed the idea of a bank bailout tax |

**Comments:**  
Consensus has been building in the EU for such a tax with France and Germany working on the details of such a tax.  
Given the size of the finance sector in the UK, this could mean billions of dollars to the Exchequer.

| **Resolution Authority** |  
Government can take cover and dismantle large institutions if it faces impending failure and poses a risk to the boarder financial system. This includes powers to annihilate shareholders and terminate employment contracts. Payments to creditors would be paid by government but recouped later from levies on the industry. |  
Comments: |

| **Consumer Protection** |  
• A consumer financial protection bureau house in the US Federal Reserve but with a high degree of independence from the central bank, would crack down on abusive mis-selling of credit  
• The Consumer Financial Protection Agency would take certain consumer regulatory responsibility of financial products from seven other agencies and centralize it in one office  
• It would have the authority and accountability to supervise, examine, and enforce consumer financial protection laws  
• It will be empowered to make rules, examine balance sheets and issue subpoenas  
• Any institution that provides consumer financial products such as mortgages, credit cards, student loans, auto loans, payday loans, and other consumer products, including payday lenders and mortgage brokers, will fall under the agency’s jurisdiction  
• The agency would ban deceptive practices and oversee new consumer financial products |  
Comments: |
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</thead>
<tbody>
<tr>
<td><strong>Comments:</strong> If the proposed bureau retains the level of independence called for in the reforms, immense unchecked power is bestowed in the hands of the Chairman to condemn financial products.</td>
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<tr>
<td><strong>Reforms and Taxes on Remuneration</strong></td>
<td>The European Commission has proposed reforms to the Capital Markets Directives to cover remuneration policies and practices within banks. The proposed reforms address required banks and investment firms to have sound remuneration policies that do not encourage or reward excessive risk-taking. Banking supervisors will also be given the power to sanction banks with remuneration policies that do not comply with the new requirements.</td>
<td>In 2009, the government imposed a one time, 50 per cent tax on bonuses.</td>
</tr>
<tr>
<td><strong>Comments:</strong> The International Monetary Fund proposed a two-step tax for the finance industry. One of them called the Financial Activities Tax, or FAT, will charge a levy of the remuneration paid out to bankers to curb excessive bonuses. The IMF stresses on the importance of such a tax to be implemented in as many countries possible to avoid regulatory arbitrage.</td>
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| **Regulation of Credit Rating Agencies** | The EU approved regulations on credit rating agencies in November 2009. (Regulation (EC) No 1060/2009 of the European Parliament and of the Council on credit rating agencies). The regulations lay down conditions for the issuance of credit ratings and introduce a registration procedure for credit rating agencies. The rules also include the following  
- Credit rating agencies may not provide advisory services.  
- They will not be allowed to rate financial instruments if they do not have sufficient quality information to base their ratings on  
- They must disclose the models, methodologies and key assumptions on which they base their ratings  
- They will be obliged to publish an annual transparency report  
- They will have to create an internal function to review the quality of their ratings  
- They should have at least three independent directors on their boards whose remuneration cannot depend on the business performance of the rating agency. They will be appointed for a single term of office which can be no longer than five years. They can only be dismissed in case of professional misconduct. At least one of them should be an expert in securitization and structured finance. |    |    |

In October 2009, The House of Representatives Financial Services Committee approved the H.R. 3890, the Accountability and Transparency in Rating Agencies Act, introduced by Congressman Kanjorski (DPA). The Act is awaiting approval both the House floor and Senate. The proposed Act makes Credit Rating Agencies liable for their ratings and imposes stricter organizational requirements on conflicts of interest and corporate governance.
Regulating credit rating agencies remains an area of fundamental divergence between the EU and the USA. The EU approach depends on a framework of strict surveillance of methodologies and ratings and detailed registration requirements. In contrast, in the USA, the Act specifically prohibits the SEC from interfering with ratings and methodologies but require investors to use only registered credit rating agencies. Clearly, the EU aims to promote accountability through supervision, whereas the USA opts for market discipline through transparency and competition.

<table>
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### Solvency regimes in the Insurance Industry

The Solvency Modernization Initiative (SMI) of the National Association of Insurance Commissioners (NAIC) began in 2008. The SMI is a critical self-examination of the United States’ insurance solvency regulation framework and includes a review of international developments regarding insurance supervision, banking supervision, and international accounting standards and their potential use in US insurance regulation. While the US insurance solvency regulation is updated on a continuous basis, the SMI will focus on five key solvency areas:

- capital requirements
- international accounting
- insurance valuation
- reinsurance
- group regulatory issues

The work plan of the SMI includes the following:

- articulation of the US solvency framework and principles
- study of other sectors’ and other countries’ solvency and accounting initiatives and the tools that are used and proposed
- improved tools for risk-focused examinations
- creation of a new reinsurance regulatory framework
- movement to principles-based reserving for life insurance products
- consideration of possible change to group supervisory methods
- implementation of new ideas to incorporate into the US solvency system

The NAIC Solvency Modernization Initiative Task Force adopted some ideas for consideration in the SMI that include the following:

- creation of new reinsurance regulatory framework
- improved tools for risk-focused examinations
- movement to principles-based reserving for life insurance products
- consideration of possible change to group supervisory methods
- implementation of new ideas to incorporate into the US solvency system

### Solvency I

The solvency margin is the amount of regulatory capital an insurance undertaking is obliged to hold against unforeseen events. Solvency margin requirements have been in place since the 1970s and it was acknowledged in the third generation Insurance Directives adopted in the 1990s that the EU solvency rules should be reviewed. The Directives required the Commission to conduct a review of the solvency requirements and following this review, a limited reform was agreed by the European Parliament and the Council in 2002. This reform is known as Solvency I.

### Solvency II

It became clear during the Solvency I process that a more fundamental and wider ranging review of the overall financial position of an insurance undertaking was required, looking at the overall financial position of an insurance undertaking and taking into account current developments in insurance, risk management, finance techniques, international financial reporting and prudential standards, etc. This project became known as Solvency II.

Solvency II will introduce economic risk-based solvency requirements across all EU Member States for the first time.

These new solvency requirements will be more risk-sensitive and more sophisticated than in the past, thus enabling a better coverage of the real risks run by any particular insurer.

Solvency II is based on a three pillar approach which is similar to the banking sector (Basel II) but adapted for insurance.

### Framework, principles, and roadmap

The SMI will include articulation of the US solvency framework and key principles in one cohesive document to convey foundational concepts underlying the US regulatory system and their interrelationships. The key principles would serve as a basis for further dialogue with other jurisdictions and institutions and allow for a comparison of US solvency principles with solvency principles from other regimes. The principles would also provide a foundation from which to establish goals, priorities and long-term modernization plans for a more robust US solvency regulation framework.

The first pillar contains the quantitative requirements. There are two capital requirements, the Solvency Capital Requirement (SCR) and the Minimum Capital Requirement (MCR), which represent different levels of supervisory intervention. The SCR is a risk-based requirement and the key solvency control level. Solvency II sets out two methods for the calculation of the SCR: the European Standard Formula or firms’ own internal models. The SCR will cover all the quantifiable risks an insurer or reinsurer faces and takes into account of any risk mitigation techniques. The MCR is a lower requirement and its breach triggers the ultimate supervisory intervention: the withdrawal of authorization.
Financial Stability and Systemic Risk: Lenses and Clocks

### Study of other solvency and accounting initiatives

The SMI includes analysis of other financial supervisory modernization initiatives, to the extent appropriate. Analysis includes the following:

- The Basel II international capital framework for banks and implementation in the US
- Solvency work by the International Association of Insurance Supervisors (IAIS)
- Solvency proposals in place or under development in other jurisdictions, including Australia, Bermuda, Canada, Switzerland and the EU; and
- Accounting standards being developed by the International Accounting Standards Board (IASB)

### SMI ideas that merit consideration

US regulators are currently studying issues relating to the uses of economic capital, enterprise risk management, and more extensive internal models (with appropriate approvals and safeguards) in the Risk-Based Capital (RBC) system. RBC will be evaluated to determine how to incorporate risks that are not currently included in the RBC calculation as well as issues related to re-calibration. There are numerous group issues under consideration including modification to the current Insurance Holding Company System Regulatory Act, discussion of non-regulated and federally regulated entities within a group, continued implementation of group supervisory colleges, and discussion of potential group capital requirements. Other ideas encompass reinsurance, insurance valuation, corporate governance, systemic risk, and accounting.

### Background:

In the early 1990s, the NAIC’s Solvency Policing Agenda resulted in a number of major changes to financial regulation. Risk-based capital requirements and the use of a detailed risk-based formula, as maintained by the NAIC, were adopted into state insurance laws by all states. Statutory accounting principles (SAP) were codified into a comprehensive guide (called “The Accounting Practices and Procedures Manual”). A centralized financial analysis unit (called the “Financial Analysis Working Group”) was formed to perform comprehensive analysis on nationally significant insurers which were identified as potentially troubled. Extensive financial solvency tools (FAST system) and automated analytical routines (I-Site) were created for regulatory use.

Regulators have continued to modify the system over the past 20 years, which has resulted in many improvements. The RBC formula now includes stochastic modelling and trend tests. SAP has been updated annually. The NAIC adopted best practices from Sarbanes-
In light of today’s national and global developments, the NAIC is responding to the call for a comprehensive review of US solvency and regulatory framework.

### Supervision of internationally active insurance groups and their group-wide risks

International Association of Insurance Supervisors (IAIS) will develop a common framework to better supervise internationally active insurance groups and their group-wide risks. The work plan includes the development of approaches to better monitor group structures, group business mix and intra-group transactions with a view to identifying risks and establishing safeguards where necessary. Further, the framework will set out quantitative and qualitative requirements, provide a platform for supervisory cooperation and interaction, and facilitate wide implementation. A comprehensive concept paper is planned to be ready for consultation in the first half of 2011 and the full framework by 2013, followed by impact assessments. Related to this, the IAIS has issued a guidance paper on the treatment of non-regulated entities in group-wide supervision.
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<tr>
<th>USA</th>
<th>EU</th>
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<tr>
<td><strong>Table 2</strong></td>
<td><strong>An Overview of the proposed reforms on bringing greater stability to derivative markets in the USA, EU and the UK</strong></td>
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<tr>
<td><strong>Oversight authority for the trading of derivatives</strong></td>
<td>Commodity Trading Future Commission is police trading in futures, options for futures including swaps markets.</td>
<td>The Financial Services Authority (FSA) is to remain the main regulatory authority, but is to step on procedures and quality.</td>
</tr>
<tr>
<td><strong>Greater standardization of OTC derivatives</strong></td>
<td>Proposed in European Commission communications of March, July and October 2009. Legislative proposals are forthcoming in 2010.</td>
<td>Great standardization is needed to increase the efficiency, data comparability and the use of central counterparty (CCP) clearing and trading on organized trading platforms.</td>
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<td><strong>Comments:</strong></td>
<td></td>
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<tr>
<td><strong>Define standard OTC derivatives</strong></td>
<td>Proposed in European Commission communications of March, July and October 2009. The European Commission is considering incentivizing standardization by reforms to the “operational risk approach” in the Capital Requirements Directive (CRD).</td>
<td>Recommends that products with a volume of turnover above a certain threshold should be standardized and subject to straight-through processing (i.e., automated from the point of trade through all post-trade processes) on their trade date.</td>
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<tr>
<td><strong>Comments:</strong></td>
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<tr>
<td><strong>Require Central Clearing of Standardized OTC Derivatives (the September 2009 G-20 communiqué called for all standardized OTC derivative contracts to be cleared through central counterparties by end 2012 at the latest.)</strong></td>
<td>Proposed in European Commission communications of March, July and October 2009.</td>
<td>To reduce counterparty risks, all OTC derivative trades need to be executed through the use of central counterparty (CCP) clearing for clearing eligible products.</td>
</tr>
<tr>
<td><strong>Standardized OTC derivatives will require to be centrally cleared by a derivatives clearing organization regulated by the Commodity Futures Trading Commission (CFTC) or a securities clearing agency regulated by the Securities and Exchange Commission (SEC).</strong></td>
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### Table 2

An Overview of the proposed reforms on bringing greater stability to derivative markets in the USA, EU and the UK

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<td>The focus is place of 4 strategies;</td>
<td>The European Commission is also discussing the extension of the 2004 Market in Financial Instruments Directive (MiFID) to all standardized derivatives. Legislative proposals are forthcoming in 2010.</td>
<td>Comments: The FSA and HM Treasury support the greater use of CCP clearing arrangements in OTC derivative markets for products which are ‘clearing-eligible’. However, they propose that CCPs should not be forced to clear a product if they are unable to manage the risk of doing so. Equally, regulators should have the ability to decide if a product is not eligible for clearing if they are not comfortable with the risk management processes available in CCPs. For these reasons the FSA and HM Treasury do not support proposals to mandate CCP clearing for all Standardized derivatives.</td>
</tr>
<tr>
<td>1. proposing legislation to establish common safety, regulatory and operational standards for central counterparties (CCPs), 2. improving collateralization of bilaterally cleared contracts, 3. substantially raising capital charges for bilaterally cleared as compared with CCP-cleared transactions 4. mandate CCP-clearing for standardized contracts;</td>
<td>Comments: This provision aims to promote financial stability and reduce inherent risks that arise when a complex web of dealers, intermediaries and other actors are involved in bilateral transactions. A potential loophole is non-standardized products with are highly tailor and customized. Given the level of innovation inherent to OTC markets, it is very likely that market actors will create a fresh range of customized products that will escape clearing. However, according to the CFTC, OTC products have become far more standardized and 75 to 80 per cent of them have become sufficiently standard to be centrally cleared. In addition, the CFTC suggests that sophisticated computerization will allow for efficient clearing and trading.</td>
<td>Require standardized OTC derivatives to be traded regulated exchanges Proposed in European Commission Communications safety of the derivatives Markets of March, July and October 2009. Support EU proposals</td>
</tr>
<tr>
<td>Require standardized OTC derivatives to be traded regulated exchanges</td>
<td>Standardized OTC derivatives will be required to be traded on a CFTC- or SEC-regulated exchange or a CFTC- or SEC-regulated alternative swap execution facility.</td>
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<td>The European Commission is also discussing the extension of the 2004 Market in Financial Instruments Directive (MiFID) to all standardized derivatives. Legislative proposals are forthcoming in 2010.</td>
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**Comments:** The objective is to improve transparency, price discovery and guard against manipulation. The legislation only targets standardized products and stakeholders question if this will give rise to even more sophisticated customization across OTC markets. But the Bank for International Settlements data indicates that more than 95 per cent of credit default swap transactions are between financial institutions, and hence a large proportion of OTC transactions will be regulated.

| Move More OTC Derivatives into Central Clearing and Exchange Trading through higher capital requirements and higher margin requirements for non-standardized derivatives. The September 2009 G-20 communiqué stated that non-centrally cleared contracts should be subject to higher capital requirements than those which are centrally cleared. | Comments: | Comments: |
| Dealers will be required to maintain higher capital requirements and higher margins for non-standardized derivatives. An OTC derivative that is accepted for clearing by any regulated central clearinghouse will be presumed to be standardized. The CFTC and SEC will have the authority to prevent attempts by market participants to use spurious customization to avoid central clearing and exchange trading. | The Commission has proposed to widen the difference of capital charges between centrally cleared and bilaterally cleared contracts in the CRD. The European Commission Communication on the safety of derivative markets, October 2009, expressly refers to the “substantially raising capital charges for bilaterally cleared as compared with CCP-cleared transactions.” The European Commission is also discussing the extension of the 2004 Market in Financial Instruments Directive (MiFID) to all standardized derivatives. | OTC trades which are not centrally cleared should be subject to robust bilateral collateralization arrangements and appropriate risk capital requirements. This approach may differ for non-financial firms given the different nature of the risks they pose to the financial system. The UK also calls for an international agreement that will spell out which products are “clearing eligible.” |

**Comments:** The objective is to encourage the use of standardized derivatives and encourage movement into regulated clearinghouses and exchanges.
Table 2
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| The legislation also provides for including all OTC derivatives including interest rate swaps, currency swaps, foreign exchange swaps, commodity swaps, equity swaps, credit default swaps and any new product that might be developed in the future. The objective of setting capital requirements will be to recognize how CDS contracts can quickly turn from consistent revenue generators to serious losses for the seller of protection. Thus, regulation should account for this “jump to default” exposure by requiring sufficient capital and reserves to cover the CDS in the event of a credit event. Then, it will be the dealers (and not the public) that will bear the consequences of the risks inherent in derivatives trading. It is not clear if the USA will be considering non-financial corporate firms differently. | The objective of setting capital requirements will be to recognize how CDS contracts can quickly turn from consistent revenue generators to serious losses for the seller of protection. Thus, regulation should account for this “jump to default” exposure by requiring sufficient capital and reserves to cover the CDS in the event of a credit event. Then, it will be the dealers (and not the public) that will bear the consequences of the risks inherent in derivatives trading. It is not clear if the USA will be considering non-financial corporate firms differently. | The UK makes the case to treat corporate operating on OTC market’s differently. It also recommends that once clearing eligible products are identified, regulators should set challenging targets for CCP usage with active monitoring of progress against these rather than mandate the use of CCP clearing. The UK Authorities have asked market participants, including dealers, buy-side firms and corporates, to undertake a fundamental review of current bilateral processes. The deliverables are:  
• A report in January 2010 that will provide regulators and policy makers with details on how the existing processes function, identifying risk and proposing the most effective method for strengthening risk management procedures for non-CCP cleared transactions.  
• Agreement by March 2010 on a global roadmap for changes to improve the robustness of the arrangements between both industry and regulators; to be implemented by industry thereafter, with international regulatory oversight.  
These reports will be presented to the European Commission to contribute to the drafting of legislation. |

Require Transparency on transactions and positions in OTC Derivative Markets

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<tr>
<td>All relevant federal financial regulatory agencies will have access on a confidential basis to the OTC derivative transactions and related open positions of individual market participants. The public will have access to aggregated data on open positions and trading volumes.</td>
<td>The European Commission Communication on the safety of derivative markets, October 2009, calls for mandating market participants to record positions and all transactions not cleared by a CCP in trade repositories and increasing transparency of trading as part of the review of the Markets in Financial Instruments Directive (MiFID) for all derivatives markets including for commodity derivatives.</td>
<td>No reference in FSA and H.M. Treasury position papers.</td>
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### Table 2

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<td><strong>Comments:</strong></td>
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<td>Better transparency and increase disclosure may bring better pricing and lower risks. Note that during the financial crisis, Wall Street and the Federal Government had no price reference for assets referred to as “toxic.”</td>
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<td>There are also calls for standards for documentation, netting and other non-economic terms of derivative contracts.</td>
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<td>There is also the need for standardization on record keeping. Dealers should be required to post all bilateral un-cleared transactions to trade repositories and information on all cleared transactions to clearinghouses so that regulators have access to information on all of the transactions—both un-cleared and cleared.</td>
<td></td>
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<tr>
<td><strong>Regulation of all OTC Derivative Dealers and Other Major Market Participants</strong></td>
<td><strong>Proposed in European Commission Communications safety of the derivatives Markets of March, July and October 2009.</strong></td>
<td><strong>Legislative proposals are forthcoming in 2010.</strong></td>
</tr>
<tr>
<td>Supervision and regulation of all OTC Derivative Dealers and other Major Participants in the OTC Derivative Markets. This includes any firm taking large positions in OTC derivatives and major market participants that are not banks.</td>
<td>The October 2009 Communication commits to “increase transparency of trading as part of the review of the Markets in Financial Instruments Directive (MiFID) for all derivatives markets including for commodity derivatives.”</td>
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<tr>
<td>The federal banking agencies, CFTC, and SEC will be required to provide prudential supervision and regulation—including strict capital and margin requirements—for all OTC derivative dealers and major market participants.</td>
<td>Legislative proposals are forthcoming in 2010.</td>
<td></td>
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<tr>
<td>The CFTC and SEC will be required to issue and enforce strong business conduct, reporting, and recordkeeping (including audit trail) rules for all OTC derivative dealers and major market participants.</td>
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<tr>
<td><strong>Comments:</strong> The original Bill made no exception for non-financial end users. This has now been reserved by the house of representatives.</td>
<td><strong>Comments:</strong> Supports the case that non-financial firms present low systemic risk.</td>
<td><strong>Comments:</strong> Makes the case that non-financial firms’ present low systemic risk.</td>
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<tr>
<td><strong>Provide regulators with the Tools and Information Necessary to Prevent Manipulation, Fraud, and Abuse</strong></td>
<td><strong>The CFTC and SEC</strong></td>
<td><strong>European Commission Communications of October 2009 on the safety of the derivatives markets proposes to</strong></td>
<td>In addition, the European Commission has proposed in September 2009, to reform the Prospectus Directive, which lays down the rules governing the prospectus that has to be made available to the public in case a public offer or admission to trading of transferable securities in a regulated market takes place in the EU. One of its major changes is the introduction of a “passport mechanism”: the prospectus approved by the competent authority in one Member State is valid for public offers and admission to trading of securities in the entire EU. Prospectus Directive will be aligned with the reforms proposed under the Directive on Markets in Financial Instruments (MiFID).</td>
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<tr>
<td><strong>The CFTC and SEC</strong></td>
<td>The legislation gives the CFTC and SEC clear authority to:</td>
<td><strong>European Commission Communications of October 2009 on the safety of the derivatives markets proposes to</strong></td>
<td><strong>Comments:</strong></td>
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<tr>
<td></td>
<td>- Deter market manipulation, fraud, insider trading, and other abuses in the OTC derivative markets.</td>
<td>“Enhance market integrity and oversight by clarifying and extending the scope of market manipulation as set out in the Market Abuse Directive (MAD) to derivatives and by giving regulators the possibility to set position limits.”</td>
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<td>- Set position limits and large trader reporting requirements for OTC derivatives that perform or affect a significant price discovery function with respect to regulated markets.</td>
<td>In addition, the European Commission has proposed in September 2009, to reform the Prospectus Directive, which lays down the rules governing the prospectus that has to be made available to the public in case a public offer or admission to trading of transferable securities in a regulated market takes place in the EU. One of its major changes is the introduction of a “passport mechanism”: the prospectus approved by the competent authority in one Member State is valid for public offers and admission to trading of securities in the entire EU. Prospectus Directive will be aligned with the reforms proposed under the Directive on Markets in Financial Instruments (MiFID).</td>
<td><strong>Comments:</strong></td>
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<tr>
<td><strong>Comments:</strong></td>
<td>The objective will be to provide full transparency that will enable regulators to detect and deter manipulation, fraud, insider trading, and other abuses.</td>
<td><strong>Comments:</strong></td>
<td><strong>Comments:</strong></td>
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<td>The legislation provides explicit steps to prevent manipulation. For example, in the case of single-issuer CDS or narrow-based CDS, the SEC has consistent authority these instruments as it has with all securities and securities derivatives under its jurisdiction. In addition, the SEC should have authority to set position limits in single-issuer and narrow-based CDS markets as it now has for other single-issuer or narrow-based securities derivatives.</td>
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## An Overview of the proposed reforms on bringing greater stability to derivative markets in the USA, EU and the UK

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<td>The legislation allows the SEC to aggregate and limit positions with respect to an underlying entity across markets, including options, equity securities, debt and single-stock futures markets. These reforms however, does not yet address the phenomenon that bond holders and creditors who have CDS protection that exceeds that actual credit explore may benefit in the underlying firms bankruptcy that if the underlying firm is successful. Ways to prevent this kind of conduct might include: a) require CDS protected creditors of bankrupt companies to disclose their positions, b) restrict the participation of CDS protected creditors in bankruptcy proceedings.</td>
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### Protecting Unsophisticated Investors

The legislation tightens the definition of eligible investors that are able to engage in OTC derivative transactions to better protect individuals and small municipalities

Proposed in European Commission Communications safety of the derivatives Markets of March, July and October 2009.

The European Commission is also discussing the extension of the 2004 Market in Financial Instruments Directive (MiFID) to all standardized derivatives.

In addition, the European Commission has also proposed in September 2009, reforms to the Prospectus Directive to the following effect:

- some types of securities issue will be subject to less comprehensive disclosure requirements (small companies, small lenders, rights issues and government guarantee schemes);
- improvements to the format and content of the prospectus summary;
- there are clearer exemptions from the obligation to publish a prospectus when companies sell through intermediaries (“retail cascades”) and for employee share schemes;
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| **USA**  | • disclosure requirements that currently overlap with the Transparency Directive will be repealed;  
           | • issuers of all non-equity securities will be able to determine their home Member State;  
           | • the definition of “qualified investors” in the Prospectus Directive will be aligned with the one of “professional clients” as defined in the Directive on Markets in Financial Instruments. | |  
|         | **EU**                                                              | **UK**                                                             |
| **Comments:** | Registration of all relevant OTC derivative trades in a trade repositories | Registration of all relevant OTC derivative trades in a trade repository will allow regulators to have the appropriate access to the information they need to fulfill their regulatory responsibilities across all asset classes |
| **Registration of all relevant OTC derivative trades in a trade repositories** | Registration in a trade repository has essential to provide regulators with the real time information for effective enhancement. | Proposed in European Commission Communications safety of the derivatives Markets of March, July and October 2009.  
Legislative proposals are forthcoming in 2010. |  
| **Comments:** | | | Comments: The UK is working with the OTC Derivative Regulators Forum (ORF) to deliver this across a number of asset classes |
| **Call for global standards for centralized clearing** | Working with the auspices of Basel II and the Bank for International settlements | Working with the auspices of Basel II and the Bank for International settlements. | Working with the auspices of Basel II and the Bank for International settlements.  
The UK also called for an EU Clearing Directive. |
| **Comments:** | | | |  
| **Supervision of Hedge Funds** (following the G-20’s commitment in to regulate all institutions, markets and instruments) | The USA is considering a registration requirement, as with reforms proposed for credit rating agencies. | EU has proposed a draft Directive for the Regulation of Alternative Investment Fund Managers (AIFM). This requires the following:  
Hedge funds, private equity, venture capital funds investment trusts and property funds will need to obtain government authorization, meet conduct standards including regular disclosure to regulators and investors. | |  
| **Comments:** | | | |
### Table 2
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<td>USA</td>
<td>Larger funds will be subject to regulatory oversight on their total borrowing.</td>
<td>Fund managers will face restrictions on remuneration processes. This will include multi-year deferrals on large bonuses, claw backs if performance or risks turn negative and other measures that link risk to remuneration.</td>
<td>Increased responsibilities for depository banks that serve as custodians for fund assets.</td>
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<td>Comments: A proposal by Democratic Party Representative Paul Kanjorski of Pennsylvania proposed to require private pools of capital with more than $30 million in assets to register with the Securities and Exchange Commission, with the exception of venture capital funds.</td>
<td>Comments: As the draft directive applies to managers of alternative investment funds the Commission hopes to ensure that the whole “non-harmonized funds sector” is covered.</td>
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<td>Senator Dodd’s proposal would require that hedge funds with more than $100 million in assets be registered with the SEC and disclose financial Information.</td>
<td>The draft directive also applies some thresholds: it will not be applicable to leveraged funds below €100 million, and to non-leveraged funds below €500 million. Such thresholds do not apply to investment advisors and asset managers that fall under the EU’s MiFID Directive (brokers) or UCITS (investment funds) rules.</td>
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<td>Practically, this would mean that affected funds would have to disclose information about their fees, risks, trading practices, and other elements of their business, which brings the proposal closer to what is being discussed in the EU.</td>
<td>The draft directive disclosure requirements and threshold includes firms with more than 50 employees.</td>
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<td>There are also several areas that remain unresolved:</td>
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<td>- Conditions under which funds and managers based outside the EU do business with professional investors in EU member states.</td>
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<td>- How professional investors in the EU can invest in funds outside EU member states which are not subject to compliance with this Directive?</td>
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<tr>
<td>- Which non-EU funds will be able to obtain the “passport” to conduct business in the EU provided they meet the required standards?</td>
<td>- If remuneration rules will be drafted as “guidelines” or more stringent requirements?</td>
<td>- Will private equity profits in the form of “carried interest” be exempt for the Directive?</td>
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<tr>
<td>Exemptions for Non-Financial Firms</td>
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<tr>
<td>Non-financial firms that use derivative products for legitimate hedging will be except from trading on exchanges.</td>
<td>A clear position on this yet to emerge.</td>
<td>A clear position on this yet to emerge.</td>
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<tr>
<td>Comments:</td>
<td>Comments:</td>
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<td>The EU Parliament and the EU Internal Markets Directorate have publicly announced that they will consider the case of non-financial institutions and their need to participate in derivative markets.</td>
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<td>Deposit taking banks have to establish separate entities to trade in derivatives</td>
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<td>Deposit taking banks are required to operate derivate trading as separate entities</td>
<td>A clear position on this yet to emerge.</td>
<td>A clear position on this yet to emerge.</td>
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<td>Comments:</td>
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