



Environmental, Social and Governance factors in Country Risk Management – a new horizon

October 2013



CRO FORUM

Table of Contents

1	Introduction	2
2	Why ESG country risk management?	3
3	UN Global Compact - ESG on the international stage	6
4	ESG country risk management using ESG factors	7
5	Approaches to ESG country risk management	10
6	ESG country risk management – case studies	12
6.1	A comprehensive ESG risk framework	12
6.2	ESG integration for investing in sovereign bonds	12
7	Conclusion: a common position	14
8	Annex	15
8.1	Selected events worldwide related to ESG factors	15
8.2	Key socio-economic indicators Egypt 2005 - 2011	23
8.3	Principles for Responsible Investments (PRI)	24
8.4	Principles for Responsible Insurance (PSI)	24
8.5	External sources of information	25
9	Glossary of abbreviations	26
10	References	27

1 Introduction

This paper is the fourth¹ blueprint in our series on managing environmental, social and governance (ESG) challenges in business transactions, focusing on the core functions of the insurance industry – risk transfer and investments.

Environmental, socio-economic and geopolitical developments shaping country risk profiles have become a focal point for the insurance industry in the past few years. This is because they address one business-critical issue, namely the stability of countries.

Stability is a foundation for any business undertaking worldwide. It is especially important for insurers since they are obliged to provide capital strength over the long term. Therefore, they need stable societies to invest in.

Since the end of the Cold War in the late eighties, many regions of the world have undergone political, economic and social transformations. In some countries these changes were gradual, with economic progress going hand in hand with societal development. Others were sudden and disruptive such as developments which are still ongoing in the Middle East and northern Africa.

Some of the abrupt transformations continue to have a negative impact on the economies of the affected countries. These impacts have been felt by the insurance businesses operating in these markets. Although country and political risk management systems were in place, their ability to detect and monitor the developments we now witness was limited.

Classic country risk management approaches have concentrated on credit, political and financial risk criteria. These largely tried to capture the ability of a country to serve its financial obligations. They were not designed to identify imbalances and inadequacies in the environmental, socio-economic and political spheres. Capturing these aspects requires an enhanced, more holistic approach.

A new method of this kind could include an assessment of environmental, social and governance (ESG) factors, because they provide additional information about potential emerging issues. ESG country risk management will also help us to better understand geopolitical developments potentially leading to disruptive transformations. Enhanced country risk ratings derived from this process will also enable us to make more informed business decisions in underwriting, investments and reputational risk management.

ESG country risk management could not only be of interest to the insurance industry but also to the whole financial services sector, official donor institutions and indeed to all other entities across the economic spectrum.

It is hoped that the ideas set out in this publication will prompt risk professionals to include ESG country risk management in their toolkits as a matter of course. Doing so, will help to create a proactive, pre-emptive risk management culture which enables disciplined risk-taking and will also assist in protecting the reputation of the companies undertaking it.

¹ Previous publications: *Recommendations for Managing Environmental, Social and Ethical Challenges in Business Transactions (August 2010)*; *CRO Forum Blueprint on Anti-Personnel Mines and Cluster Munitions (August 2012)*; *CRO Forum Blueprint on Oil Sands (December 2012)*, available on: <http://www.thecroforum.org/>

2 Why ESG country risk management?

The transformational events experienced worldwide over the past two decades have shown that change can come rapidly and unexpectedly. The most recent events of the Arab Spring demonstrated that failing to address environmental, social and governance discrepancies in countries in a timely manner can lead to sudden and disruptive revolutions.

Such events also come at a cost. While the human toll rightly garners worldwide attention, other more long-term effects are now also becoming visible.

There is the ongoing debate about the values and social contracts upon which states and societies could be founded. There are tensions and frictions in generating new forms of debate and compromising within societies. As a result societies also face cost for creating new governmental structures. Such activities need time and, while ongoing, there are increased levels of insecurity, which in turn also have a negative impact on the economy.

The insurance business as part of the economy cannot escape the effects of uncertainty. It impacts premium income in transitioning countries as well as the investments insurers make there. In addition, long-term instability shapes business and investment decisions by other players. These processes impair future growth even more. As a result, social tensions in countries are aggravated afresh. A spiral starts, that impacts the economy and with it the insurance business negatively again.

The core function of insurance is to offer risk protection. Insurance cover allows people and businesses to safeguard themselves from risks that would otherwise threaten their livelihoods. Insurance thus encourages people to start new commercial ventures and helps entrepreneurs to run their companies. Insurance also drives infrastructure projects, healthcare programs and education. Especially in emerging markets, where the middle class is rapidly growing insurance can play a major role in enabling economic growth.

By investing the premiums received in equity, corporate and sovereign bonds insurance companies also build up their assets to pay for future losses resulting from the risk protection provided. These investments, in turn, provide capital for private businesses and public entities to start new ventures or infrastructure projects. In today's economic environment, such activities are becoming increasingly significant in high growth market regions like Latin America or Asia Pacific.

The high growth potential in these markets can go hand in hand with a greater downside exposure for investment and insurance activities. The downside derives from significant differences in

Case study: Arab Spring

The Arab Spring uprisings provide an example of how socio-economic and governance failures can provide ground for social unrest. Economic, political and environmental problems all contributed to a situation that only needed a trigger such as the self-immolation of a fruit vendor in Tunis. His reaction to incessant harassment by the police unleashed a wave of revolutionary upheaval across the Middle East and North Africa (MENA) that brought down four long-standing governments.

MENA lagged far behind other world regions such as Asia and Latin America in terms of economic growth. For example, per capita income growth since 1980 was only 0.5% annually. Large segments of the young population are well educated but cannot find jobs. The low level of employment is aggravated by a high urbanization rate.

Economic governance is dominated by small groups of elites and corruption is widespread. Oil and gas resources are crowding out investments in sectors that require higher skilled labor. Large wealth disparities, poor public services in the area of health, education, or public security, low infrastructure investments, and policy-making and regulation biased in favor of an elite around political leaders lead to frustration and distrust vis-à-vis authorities. Finally, the sharp increase in food prices in early 2011 exacerbated public discontent leading to the revolutions, which toppled governments over the region.

regulatory, economic and political frameworks compared to global best practice benchmarks. In addition, divergent social and environmental standards can play a role. Not all countries will be affected in this way but those who are will need to be identified so that the insurance industry can evaluate variances correctly to steer its business. ESG country risk management can play a crucial role here.

For the purposes of this paper, country risk is defined as the downside exposures that companies face when providing insurance, investing or operating in a country. It depends on the country's environmental, economic, societal and political circumstances. Country risk can cover factors as varied as the legal and political environment, credit risk, corruption levels, socio-economic variables or the status of the environment.

Covering these issues in an ESG country risk management approach will benefit long-term business success and investment performance. In addition it will also help the reputation risk management of insurance companies.

Reputation is important to the insurance industry because it is highly dependent on stakeholder trust. Investors, clients, regulators and the general public have high expectations of the business and its role in addressing societies' environmental, social and governance challenges. Not meeting these expectations in this age of globalization, interconnectivity and social media can damage stakeholder trust.

Expectations are especially high when it comes to business fostering responsible and sustainable development in countries where fewer safeguards are in place to manage ESG challenges. Incorporating ESG issues in companies' risk management practices and operations is therefore a reflection of investor and stakeholder interest in broad societal goals. The reputation the insurance industry has built up over the years in this area can suffer and, in extreme cases, may lead to the loss of a company's "social license" to operate.

The trust reflected in this "social license" is vital for long-term business success and investment performance. Both are important for the ability of the industry to shoulder large catastrophes all over the globe. The capital base to pay for e.g. earthquakes, windstorms, hurricanes and others is built up over years and decades. Long-term sustainability of investments is thus key for the industry. The same sustainability is also needed on the insurance side of the business. Without profitable underwriting in the long-term, capital cannot be accumulated.

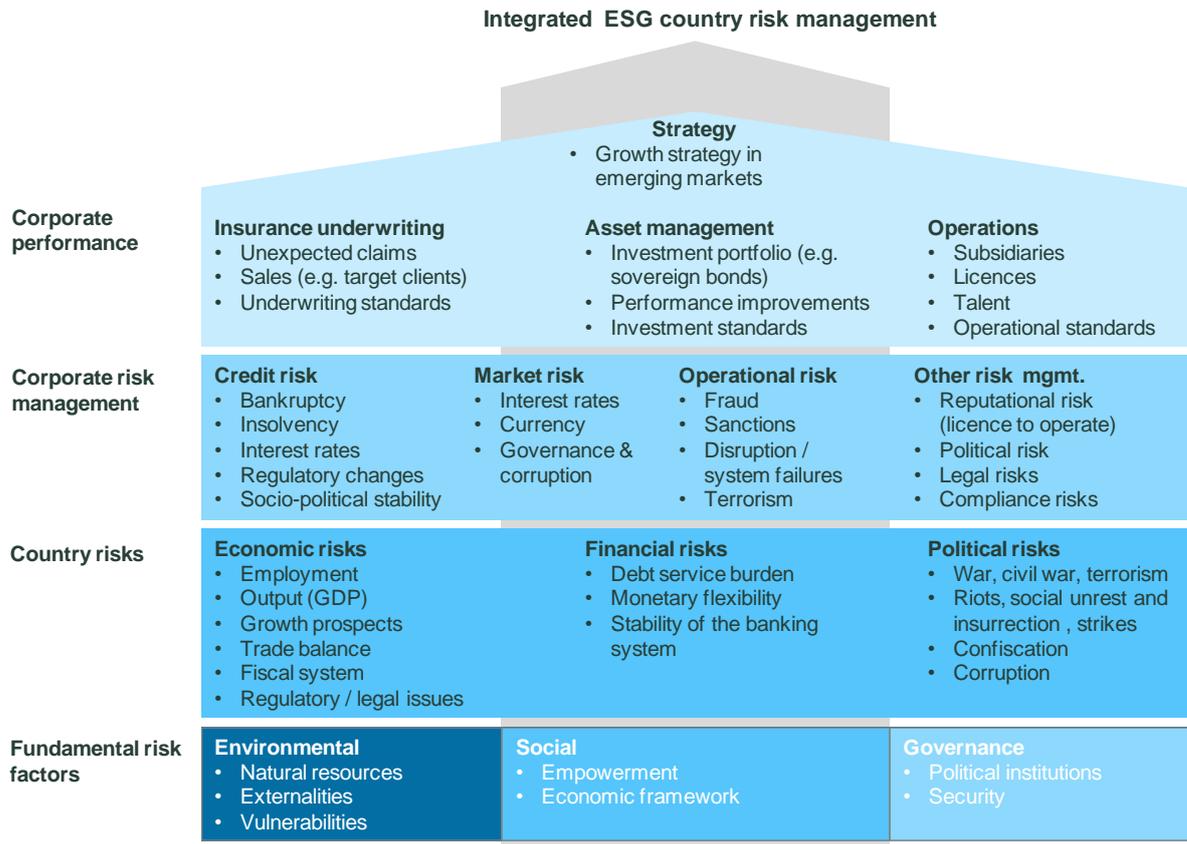
Due to these business objectives on the investment and underwriting side, the insurance industry has always looked ahead. Anticipating change is one core competency the industry has developed. Today it has sophisticated methodologies for hazard, vulnerability & risk assessment and in addition a wealth of experience in the potential mitigation of risks. All are applied to insureds, whole insurance portfolios and also on the asset management side of the business.

Companies have now started to apply some of these methodologies to country risk. A common feature of these new approaches is that they aim to enhance the classic political and credit risk assessment along three factors: environmental, social and governance (ESG).

The challenge lies in integrating ESG factors relevant for country risk assessment into the business processes of an insurance company. Depending on the company, approaches vary. Still several

ideas have been developed. One way is to map the fundamental ESG factors to country risk-specific categories. An example is shown in Figure 1.

Figure 1: ESG country risk management



The mapping shows the connection between the ESG factors and country risk. This, in turn, enables corporate risk management to identify which business fields will be affected by the risk drivers. Some may only be relevant for credit risk, others for legal or reputational risk management. Depending on the relevance, specific action can then be taken to ensure adequate business decisions in underwriting, asset allocation and operations. Over the long term, this will help companies to achieve their strategic goals with respect to corporate performance.

3 UN Global Compact - ESG on the international stage

ESG-related matters have not only been a concern for the insurance industry. They have also been a topic on the international agenda for quite some time. Most notably, in 2000 the United Nations (UN) launched the UN Global Compact. It defines 10 principles in the areas of human rights, labour, environment and anti-corruption.

Box 1: The UN Global Compact Principles

Human rights

- *Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights and*
- *Principle 2: make sure that they are not complicit in human rights abuses*

Labour

- *Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining*
- *Principle 4: the elimination of all forms of forced and compulsory labor*
- *Principle 5: the effective abolition of child labor and*
- *Principle 6: the elimination of discrimination in respect of employment and occupation*

Environment

- *Principle 7: Businesses should support a precautionary approach to environmental challenges*
- *Principle 8: undertake initiatives to promote greater environmental responsibility and*
- *Principle 9: encourage the development and diffusion of environmentally friendly technologies*

Anti-corruption

- *Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery*

Source: Global Compact, <http://www.unglobalcompact.org/>

Over 10,000 business signatories did voluntarily commit to aligning their operations and strategies with the Global Compact. To reinforce it and to provide guidance more specific to the insurance industry, the UN has also backed two more agendas: the Principles for Responsible Investment (PRI) in 2006 and the Principles for Sustainable Insurance (PSI) in 2012². The PRI promotes six voluntary rules for investors to integrate ESG issues into investment practices; the PSI promotes four principles for insurance companies to incorporate into their business.

To live up to the commitments made under the Global Compact, several companies have adopted the principles as a basis for building enhanced ESG country risk assessment methodologies by linking the four areas of the Global Compact – human rights, labour, environment and anti-corruption – to ESG factors.

² The PSI and PRI principles are listed in Annex 8.3 and 8.4.

4 ESG country risk management using ESG factors

To implement an ESG country risk management approach as described in the previous chapter, the environmental, social and governance elements could be assessed using appropriate factors. Properties, which can be used to select those factors are:

- **Relevance:** the factor provides pertinent information about the phenomenon being tracked and reflects the concerns of the company undertaking the ESG country risk management as well as those of relevant stakeholders;
- **Measurability:** the factor has an operational definition and concrete, reproducible and accurate measures exist;
- **Specificity:** the factor needs to be relevant to the scale of phenomenon, sensitive to incremental changes of the dimension to be assessed, not duplicated by other factors, and not subject to external influences;
- **Attainability:** data underlying the factor should be affordable and available within a reasonable time frame;
- **Time continuity:** factors should be measurable in a consistent way over time in order to assess variability of the underlying phenomena;
- **Interpretability:** factors can be measured and assessed against a baseline condition and can facilitate the analysis of trends in the underlying phenomenon, and;
- **Understandability:** factors shall be clear also to a non-specialist public and should be easy to communicate.

Finding a list of factors which fulfills all of the above requirements, is a challenging task. In reality, companies will have to strike a balance between the meaningful and workable. An example of such a list can be found in Table 1.

Table 1: Illustrative list of ESG factors and criteria³

Criteria			
Factor	Aspect	Vulnerability	Mitigation measures
Environmental	Natural resources	<ul style="list-style-type: none"> – Natural resources – Biodiversity and endangered species – Water resources – Land use 	<ul style="list-style-type: none"> – Areas under sustainable management – Environmental policy frameworks & international standards – Information about the level of protection of natural resources
	Emissions	<ul style="list-style-type: none"> – Greenhouse gas emission levels due to economic activity and land use change. 	<ul style="list-style-type: none"> – Emission reduction policies by using non fossil fuels and improving energy efficiency.
	Environmental exposure	<ul style="list-style-type: none"> – Exposure to extreme events like windstorm, tropical cyclones, flood, drought, wildfires and earthquakes – Strong economic dependence on natural resource revenues from forests, minerals, coal, oil, gas etc. 	<ul style="list-style-type: none"> – The country's efforts in terms of environmental sustainability, considering both policy measures and investments – The country's resilience to adverse natural events using social, governance, institutional, physical, and economic yardsticks – Effectiveness and speed in the implementation of adaptation projects as well as the readiness of the society and the economy to absorb and adhere to adaptation efforts
Social	Empowerment	<ul style="list-style-type: none"> – Gender – Social inclusion and equality – Health status – Education & technology readiness 	<ul style="list-style-type: none"> – Equal access policies – Social inclusion policies – Health expenditures – Expenditures in education
	Economic framework	<ul style="list-style-type: none"> – Poverty – Employment – Vulnerability to food crises 	<ul style="list-style-type: none"> – Social expenditures – Sustainable business – Investments in agriculture
Governance	Political institutions	<ul style="list-style-type: none"> – Government effectiveness – Corruption – Accountability/ responsiveness – Rule of law – Civil liberties/political rights 	<ul style="list-style-type: none"> – Democratic governance – Control of corruption – Judicial independence – Enforcement power – Protection of human rights
	Security	<ul style="list-style-type: none"> – External conflict – Internal violence – Organized crime 	<ul style="list-style-type: none"> – International cooperation – Amount of social capital – Effectiveness of security enforcement

As can be seen above, criteria have been assigned to the factors. These are split into two subgroups: vulnerability and mitigation. Evaluating vulnerability and mitigation in parallel is useful because, while countries can be heavily exposed to a number of risks, they may also possess mitigation measures and thus be very resilient.

³ The table is illustrative, not exhaustive and not weighted.

One example is Japan's reaction to the 2011 earthquake and tsunami. While focus was rightly placed on the severe failures in Fukushima, the fact that Japan in general had very effective prevention measures in cities and villages to mitigate the effects of the natural perils was overlooked. Examples include appropriate building standards, the implementation of disaster risk reduction strategies and coastal hazard countermeasures. Though the losses were still horrible, they would have been worse with less preparation. On this occurrence, Japan benefited from its disaster preparedness and governance structure to mitigate the disastrous impact of earthquakes and the tsunamis.

Other countries, however, may face unmitigated vulnerabilities. Yemen, for example, is an extremely dry country and has, at the same time, one of the lowest per capita water storage capabilities in the world (only 21 cubic meters of water per inhabitant, in Australia it is 4,700). In a dry hydrological year or in the case of increased population pressure, it is likely that Yemen will be hard pressed to ensure sufficient water supply and/or to mitigate the resulting social tensions, which have already been evident to some extent in the past.

As the examples of Japan and Yemen show, any list of criteria and their respective weightings vary depending on the specific circumstances of the country. Earthquakes are not a key hazard in Yemen and drought is not a major concern in Japan, hence earthquake mitigation is important in Japan while water storage should be a topic in Yemen. Furthermore, when a company embarks on ESG Country Risk Management, it needs to carefully evaluate its own commitments, policies, strategies and business requirements.

Case study: water issues

Water scarcity will pose a concrete risk to country and regional stability in the near future.

Already now the need to cope with decreasing water availability is often coupled with extreme climate events. The latter may become even more frequent because climate change may shift rainfall patterns. This can contribute to additional tensions around water in the future.

Even today social unrest is often triggered by dams. Across Asia, Africa and Latin America, the construction sites of large hydraulic infrastructure have been the theatre of protests and violent confrontations.

Social unrest has also taken place in relation to changes in water tariffs and overuse of the resource .

Water is at present already heavily contested in several regions. Relations between Turkey and Syria have been stressed due to construction of dams on the Euphrates River. The same is currently ongoing between Ethiopia and Egypt on the Nile.

5 Approaches to ESG country risk management

ESG country risk management factors have already been applied in many companies in different ways. There were lessons learned and some basic approaches using ESG factors have been developed.

One approach taken by many companies is to identify and monitor ESG country risk through an ESG country risk rating, a standardized methodology that benchmarks nations according to their exposure to ESG country risk factors.

Such a rating can be generated in house or obtained from an external provider. An in-house solution has the advantage of being proprietary and tailored to the company's needs. It also allows the use of company data. The downside is the cost associated with development. The advantage of an external provider is that there are no internal development and maintenance costs. In addition, if multiple companies use the solution, a more standardized approach for a specific country in the market can develop. A downside of an external rating is that it may not be a perfect fit in respect to the sustainability policy of the company purchasing it.

In underwriting, ESG country risk ratings can be used as input to steer business based on geographic exposures. Capacities can be allocated according to the results. More concrete insights gained from the reports can also be used to steer insurance activities for clients who have projects or operations in countries of concern.

Results from an ESG country risk management approach can also be used to identify the potential for unexpected claims. For example, poverty can lead to the misuse of public infrastructure to gain access to basic services like power or water. Tampering with infrastructure, in turn, can increase the number of incidents which may be insured. Business interruptions in oil fields and mining are prominent examples in this area. Identifying these kinds of hazards is a key strength of an ESG country risk management approach.

In asset and credit risk management, many companies include ESG criteria in their sovereign bond analysis. Traditionally, government bonds are evaluated by applying macroeconomic and financial assessments. Including ESG aspects to bond analyses provides additional information, giving companies a more holistic view of the risks a country faces.

The outcome of such an analysis is either an increase or decrease in the bond yield, depending on how well a country meets ESG factors. In a similar way, a company can then limit or increase the amount of bonds it holds from a specific country. The latter approach may be restricted insofar as regulations often require insurance companies to hold a certain amount of domestic assets. Still, overall steering of bond investments on a worldwide level offers some leverage in this field.

Case study: country risk

The developments in Egypt were pointing towards instability as early as 2005. Population growth was already strongly trending upwards in the years preceding the revolution. That is why the country was characterized by a large proportion of young underemployed people. In addition a large part of the total population lived close to the poverty line. In 2010 weather events worldwide resulted in bad harvests leading to a rapid rise in food prices. The resulting price hikes also hit Egypt. Those close to the poverty line fell rapidly below it.

The state was unable to adapt to the crisis. This lack of resilience had many sources: corruption, insufficient resources due to years of economic problems and inadequate decision making.

The system was therefore not able to handle this external shock, leading first to demonstrations and in the follow up to the events which continue up to today. Key economic and social indicators showing how close to the brink Egypt was can be found in Annex 8.2.

ESG country risk management can also help to manage operational risk by anticipating sudden societal and governance changes affecting subsidiaries, licenses, talent management, operational standards and compliance requirements in a country.

Last but not least, ESG country risk management also makes it easier to comply with accepted international standards on business ethics like the above-mentioned UN Global Compact, the PRI and PSI. It thus helps to protect insurance companies' reputations.

6 ESG country risk management – case studies

6.1 A comprehensive ESG risk framework

Several transactions pose a dilemma to business practitioners: deals may be economically beneficial and perfectly fine from a legal and technical underwriting point of view, yet they may have significant environmental, social and governance downsides. Addressing such dilemmas requires a well-defined approach and the willingness to make decisions based on ESG principles.

A number of insurance companies responded to this need by establishing a comprehensive ESG risk framework specifically designed to identify and address such ESG risks. These can be defined as potentially negative environmental and socio-economic impacts of business transactions and the reputational risks that they may entail. Such an ESG framework applies to business transactions in underwriting and investments.

The framework includes a policy on how to identify and handle critical business cases based on predefined ESG factors. This approach applied to countries in an ESG country risk management process enables business practitioners to identify countries that pose a risk to business and/or reputation.

If the policy applies a transaction-specific due diligence, assessment is undertaken by experts. They carefully analyze the benefits and downsides of the transaction at hand and decide whether it is acceptable based on the company's ESG values, commitments and risk appetite.

Case study: mining

Mining conflicts have become more frequent in the past few years. These events often take place in developing countries with weaknesses in governmental constitutions, deficiencies in rules of law and issues with corruption. In addition, the mines are often located in environmentally sensitive areas where indigenous people fear for the safety of their resources. Human rights abuses often lead to riots. Some of them are listed in the Annex of this paper.

Over time, the knowledge gained from this process can result in easier-to-handle tools. One example is to compile a country watch list that identifies high ESG risk locations. The goal of such a list is to not directly underwrite risks or make investments in entities that are based there. Alternatively, companies may apply a policy that ensures that the heightened country risk is considered in any business transaction in these places. Factoring in country risk can also be done for companies operating in places of concern. Combined with a list of critical operations, e.g. mining, logging or delivery of weapons, the management of country risk becomes easier to handle in day-to-day business processes.

6.2 ESG integration for investing in sovereign bonds

Sovereign bond assessments pose a different challenge. The long-term viability of the investments has to be assured depending on the time frame the bonds run in the future. The opportunity here is to base the business decision not only on a traditional balance sheet analysis but also on the inclusion of additional ESG factors. Assessing how flexible, transparent and consistent a country handles environmental challenges, its social fabric and the design of its institutions reveal a lot about the potential for unrest. Since unrest may also negatively affect a country's ability to pay its debt obligations, the insights gained by an ESG country risk management process are highly valuable for taking investment decisions.

Aspects relating to ESG factors used were the following:

- **Institutional strength** refers to the stability and effectiveness of a country's institutions. Criteria here are e.g. the scale of public accountability, corruption perceptions, ease of doing business, human development and rule of law;
- **Political process** measures e.g. the government's ability to propose, pass and enforce its chosen legislation, the independence of public service from political pressures and the general quality of policy formulation and implementation;
- **Financial and economic strength** assesses the country's fundamental strengths and weaknesses by e.g. focusing particularly on the health of the banking sector, reliance on fuel exports and the size of the agriculture sector;
- **Structural changes** measure e.g. the trend of the country's governance quality as defined as the average of (relative) change for each of the aforementioned four sub-indicators, and;
- **External shock resilience** assesses a country's access to internal (e.g. fiscal reserves, resources) and external funds (e.g. bilateral swap arrangements, IMF lending facilities) in case of debt sustainability concerns and/or a capital market shock. Another example would be the country's exposure to cross-border stresses (e.g. geopolitical, military and foreign relations crises, environmental emergencies and disasters).

These factors are measured using a wide range of qualitative indicators supplied by international organizations or external providers. Based on these, a score is calculated and is used to steer the investment side of the business. Besides leading to better investment decisions, the process also serves to protect the reputation of a company.

7 Conclusion: a common position

ESG country risk management, as presented in this paper, demonstrates that it contributes additional valuable information complementing existing asset and credit risk management efforts. This leads to more comprehensive and robust underwriting and asset allocation, benefiting long-term business success as well as protecting the reputation of insurance companies.

As the world becomes ever more interconnected and complex, ensuring long-term business success and protecting companies' reputation is becoming increasingly challenging. Risk management tools have to adapt to this complexity. ESG country risk management is one step along this road of development. Although it cannot be a crystal ball, it can sharpen a company's awareness of significant developments, thus enabling it to prepare for both the upside and downside risks which could materialize.

Tools are one thing and the adequate application of them is another. People and businesses need insurance protection in any country - hence relocation is not practical. The methods presented here together with expert analysis could help to bridge the gap between offering insurance to all while at the same time promoting policies on sustainable development.

Implemented in this sense, it is the conviction of the authors that ESG country risk management is a state-of-the-art approach which benefits every risk professional's toolkit.

8 Annex

8.1 Selected events worldwide related to ESG factors

Year	Country	Overview
2000	India	City dwellers in India's drought-hit western state of Gujarat rioted as the municipal water supply slowed to a trickle.
2000	Iran	Three people were killed and over 150 rioters arrested following clashes over water shortages in Iran's south western town of Abadan.
2000	China	Thousands of Chinese farmers clashed with police after officials cut off water leaking from a dam near Anqiu village in Shandong province.
2001	Iran	Forty-four people were arrested after riots broke out in the central Iranian city of Isfahan against the rising water shortage.
2001	China	One thousand Chinese people displaced by the controversial Three Gorges Dam staged violent protests after being denied compensation for the loss of their homes.
2002	Algeria	Algerian rioters set fire to a town hall, ransacked a local government office and smashed cars in protest against water shortages.
2002	Bolivia	Fifty Bolivian police officers staged an angry protest in the eastern Bolivian city of Santa Cruz, demanding the removal of several superior officers they accused of corruption and mistreatment.
2003	Algeria	Electric outages and cuts to the water supply triggered rioting and demonstrations in at least two Algerian towns.
2004	China	Martial law stopped 90'000 protesters from fighting police over the loss of their homes to a hydroelectric dam.
2005	Iraq	Protests over a lack of electricity, jobs and water degenerated into rioting when police opened fire on demonstrators who had stoned the governor's offices in Samawah.
2005	China	Riot police were called in to rescue the mayor when former military construction workers surrounded him during a compensation protest in China's showcase business city of Shenzhen.
2005	France	Riots affecting 274 towns in France: 2 deaths, 8,793 vehicles damaged, 126 injured fire fighters, 200 million Euros in total damages.
2005	Hungary and Croatia	Thousands of Croats and Hungarians organized a joint protest against building a hydroelectric dam on the Drava for environmental reasons.
2006	South Africa	Riots break out in townships to protest against corruption within the ruling government.

Year	Country	Overview
2006	China	Forty farmers and ten police officers were injured during a riot by 2,000 villagers over corruption in northeast China's Liaoning province.
2007	Papua New Guinea	On 23 April 2007 local landowner groups protesting over proposed relocation settlements were successful in peacefully halting mining and processing operations at the mine.
2007	Israel	Israel's sanctions against Gaza caused water deprivation and riots and retaliation against Israel.
2007	Australia	Sydney man was charged with murder after an alleged fight over water restrictions.
2007	Sudan	Four villagers were killed after a dam protest.
2007	Yemen	At least a dozen people were killed during a land dispute between tribesmen that erupted in a southern suburb of Sana'a.
2007	Somalia	Five recorded food riots in the year.
2007	Guinea	A series of riots and unrest in Conakry, primarily related to food prices and other economic and governance issues.
2007	India	Hundreds of government food distributors were hiding in fear of their lives in eastern India after riots that were triggered when villagers accused them of stealing and hoarding food meant for the poor. Four more riots were reported that year.
2007	China	Hundreds of students rioted after a graduation ceremony at a private college in Fujian in protest of expensive fees and a lack of recognition of their qualifications.
2007	China	At least one villager was killed and dozens injured in a village in Harbin, Heilongjiang province, after residents reportedly clashed with armed police and private guards sent by developers to take over their land.
2007	Greece	The Greek Parliament passed a controversial education bill that sparked rioting in the streets of Athens. At least 20 people were injured, 47 were detained, and 11 were arrested.
2007	Mauretania	Protests triggered by sharp rises in the prices of grains and other basic foodstuffs in southeastern towns and later in Nouakchott. The first popular challenge to the policies of President Sidi Mohamed Ould Cheikh Abdallahi's government.
2007	Mozambique	Clashes in response to increased local bus fares and food prices between police and rioters killed at least four people and seriously injured more than 100. Crowds looted shops, destroyed vehicles and burned tires and electricity poles. A total of six more riots were reported that year.

Year	Country	Overview
2007	Uganda	In Makerere University the water shortage prompted a riot by students. Students blocked a road and hurled stones at motorists. Four vehicles were destroyed.
2007	Morocco	Two waves of sit-ins to protest about high food prices in March and September 2007.
2007	Senegal	After demonstrations in late 2007, several consumers' associations called a march and sit-in in March 2008 in Dakar. Street clashes with police led to at least 24 arrests. More protests followed in April.
2008	Nigeria	Violence after a protest over the price of water.
2008	Pakistan	Taliban threaten to blow up Warsak Dam, Peshewar's main water supply.
2008	Yemen	Twelve recorded food riots in the year.
2008	Zimbabwe	Civil strife in response to soaring inflation, the worsening economic situation, the spread of a cholera epidemic and presidential elections. There were food riots in Zimbabwe and soldiers attacked foreign exchange dealers. The state finally declared the cholera outbreak, which claimed more than 600 lives and infected more than 13,000 people.
2008	Morocco	Clashes in front of Morocco's parliament in Rabat in led to the sentencing of 34 people.
2008	Cameroon	Anti-government violent riots in Douala, Yaoundé, Bamenda and other major cities as widespread anger erupted over high fuel and food prices and a bid by President Paul Biya to extend his 25-year rule. Between 24 and 100 reportedly killed. There is a total of forty recorded food riots in the year.
2008	Sudan	One person was killed and six others were injured during a food riot inside a camp that housed Chadian refugees in the Sudanese region of Darfur. There is a total of four recorded food riots in the year.
2008	Cote d'Ivoire	Some 1,500 protesters marched in the Cocody and Yopougon districts of Abidjan. Riot police moved in to disperse the crowds. One person was reportedly killed and at least 10 others injured.
2008	Burkina Faso	Following violent riots in February - prompted by high food prices and increased government efforts to collect taxes from small-scale merchants - a general strike was called by unions in April 2008.
2008	Ethiopia	Riots due to drought and increased food prices in some areas in the Southern Nations, Nationalities and Peoples Region (SNNPR).

Year	Country	Overview
2008	Haiti	Demonstrators erected burning barricades in the streets of the southern city of Les Cayes to protest about rising food prices .Several hundred demonstrators joined the protest in the slum of La Savane before they were dispersed by UN peacekeepers and Haiti police firing tear gas. A total of five recorded food riots in the year.
2008	Bangladesh	Thousands of garment workers in the Bangladeshi capital of Dhaka went on strike, closing down factories in protest at spiraling food prices. Demonstrators clashed with police during a rampage in which cars and shops were smashed.
2008	Egypt	Three recorded food riots in the year. Rising prices for bread and other staples and alleged corruption sparked clashes at bakeries in poorer neighborhoods, leading to several deaths and multiple arrests.
2008	Somalia	Security forces killed at least five people in the Somali capital Mogadishu as they cracked down on riots sparked by rising food prices and record inflation.
2008	Madagascar	The government banned rice exports to cushion Madagascar against spiraling global food prices leading to riots.
2008	Tunisia	Protests over the rising costs of living and unemployment took place in Redeyef in the Gafsa mining region, with one person shot dead, 22 injured and union leaders arrested in a clash with security forces.
2008	India	A group of hungry people in Bundelkhand attacked villagers and looted food on the fringes of Mahoba's Kankuan village.
2009	China and India	China tries to block a USD 2.9 billion Asian Development Bank loan to India on the grounds that part of it was destined for water projects in a disputed area.
2009	Ethiopia and Somalia	Three killed and a community driven from their homes after a borehole dispute.
2009	China	Violent clashes over water pollution.
2009	India	A family in Maharashtra Pradesh state is killed by a mob after illegally drawing water from a municipal pipe.
2009	India	One person died and at least six more were injured in Mumbai as police's baton charged on hundreds of unruly protesters who were trying to crash into the Municipal Corporation of Greater Mumbai to demand immediate withdrawal of water cuts in the city.
2009	Koreas	North Korea releases water from a dam, causing flash flooding and deaths in South Korea.

Year	Country	Overview
2009	China	More than 180 people died in ethnic violence in a Muslim area of western China. The spark for the unrest in Xinjiang was a brawl between majority Han Chinese and Muslim Uighur factory workers 1,800 miles away. Economic tensions between Han and Uighurs contributed to the riots.
2009	China	In Panyu, about 100 family members and friends of an infant's parents, all of them migrant workers, demanded a more detailed explanation on the suspicious death of a child. When they did not get it, they went on the rampage, smashing windows and destroying medical facilities at the hospital.
2009	Venezuela	Venezuelan police dispersed a rally by opponents of the country's controversial new education law after protesters threw rocks at police and attempted to break through a barrier.
2010	Pakistan	100 killed and scores injured after fighting over irrigation water between tribes.
2010	China	Violent clashes over water pollution. Thousands of villagers from the Zhuang ethnic group clashed with Han workers over an aluminum plant that natives say dumped the sewage that poisoned their drinking water and flooded 100 homes.
2010	Philippines	The Philippine government sent troops into Manila to prevent unrest as authorities distributed water to some of the million-plus people affected by a water shortage. Many in Manila had been left with limited supplies or no water at all following a prolonged drought.
2010	Pakistan	A water dispute in Pakistan's tribal region leads to 116 deaths.
2010	India	Injuries after protests over erratic water supply in New Delhi. Hundreds of people blocked the traffic and pelted stones at police and vehicles in New Ashok Nagar area of east Delhi to protest against water shortage in their locality. This was the third major water-related riot in the capital that summer.
2010	North Korea	One person was killed by armed guards when a group of people attempted to rob a food train at Komusan railway station in Puryong-gun, North Hamgyong Province.
2010	India	Riots took place in a number of districts of Assam when poor people who were denied special ration cards for rice at concessional prices revolted and attacked government officials and destroyed public property. Lives were lost, large numbers of people injured and many buildings and offices were burnt down and damaged.

Year	Country	Overview
2010	Haiti	Riots broke out in the center of Haiti's capital as government trucks carrying rice were attacked by crowds. Shots fired by police failed to deter hungry and desperate crowds as they scrambled to grab food bags and fought each other over the supplies.
2010	Mozambique	Almost 150 people were arrested in Mozambique following riots over soaring bread prices in which 10 people were killed. There were thirteen recorded food riots in the year.
2010	South Africa	Rioting students and the police clashed at the University of Johannesburg's Bunting Road campus in protest over tuition fees.
2010	Bolivia	Riot police clashed with about 300 people who looted stores and smashed windows during a three-day public transport strike.
2010	India	Thousands of people took to the streets and ransacked and torched government properties and offices of Bihar State Electricity Board in Bhagalpur on Saturday because of the power and water crisis in Bihar.
2010	Malaysia	More than 1,000 people angry with a water privatization deal clashed with police in downtown Kuala Lumpur.
2011	Brazil	Hundreds of indigenous people staged a day-long protest at the site of the Belo Monte dam, halting construction work for about 15 hours.
2011	China	Violent clashes over water pollution.
2011	Tunisia	Over 300 recorded food riots in the year.
2011	Libya	Over 10,000 recorded food riots in the year.
2011	Egypt	Over 800 recorded food riots in the year.
2011	Mauretania	One recorded food riot in the year.
2011	Algeria	Four recorded food riots in the year.
2011	Saudi Arabia	One recorded food riot in the year.
2011	Sudan	One recorded food riot in the year.
2011	Yemen	Over 300 recorded food riots in the year.
2011	Oman	Two recorded food riots in the year.
2011	Morocco	Five recorded food riots in the year.
2011	Iraq	Twenty-nine recorded food riots in the year.
2011	Bahrain	Thirty-one recorded food riots in the year.
2011	USA	Occupy Wall Street protests spread across the US.

Year	Country	Overview
2011	Spain	Protests against the austerity policy of the government in many cities in Spain.
2011	Greece	Protests against the austerity policy of the government in many cities in Greece.
2011	Portugal	Protests against the austerity policy of the government in many cities in Portugal.
2011	Syria	Over 900 recorded food riots in the year.
2011	Uganda	Five recorded food riots in the year. The protest movement began in Kampala. Ugandans were angry because of the rising prices of food and fuel, which have driven up the overall cost of living in the country. Uganda's annual inflation rate increased to 14.1% in April compared with 11.1% the previous month.
2011	China	South Chinese villagers wielding clubs and stones attacked an industrial park, incensed by reports that an official had sold land without compensating them.
2012	Russia	Protests against presidential elections in Russia.
2012	Indonesia	At least two people were killed and eight wounded in clashes between protesters and police during demonstrations over a planned gold mine in eastern Indonesia. Residents fear mining will threaten forest areas and drain water.
2012	South Africa	Riots at several mines in South Africa resulted in violence which left many dead and injured.
2012	India	Three people were injured in clashes that broke out between villagers and policemen in Delhi's suburb Noida. The clashes took place when officials from the Noida Development Authority along with the police went to Noida Extension to demolish some unauthorized construction.
2012	Cambodia	Riot police hit and kicked protesters as they marched in the capital Phnom Penh to demand compensation for being evicted from their homes to make way for a luxury development. At least five protesters were injured, all of them women.
2012	China	At least 12 people were killed in riots in Xinjiang, the restive region in China's far northwest, as rioters armed with knives attacked and killed 10 people and the police shot dead two rioters.
2012	India	Desperate residents, furious at water shortages and power cuts lasting up to 18 hours per day, fought running battles with police, hurled stones, burnt tires and blocked off roads.

Year	Country	Overview
2013	Guatemala	A mining project provoked an increase in conflict in the region, which recently escalated on 27 April when the mining company's private security shot at community members, injuring six men, two of them seriously.
2013	India	Unrest and protests in Tawang against 15 proposed dams, which led to violence by police against Buddhist monks who joined the protests.
2013	Spain	Riots break out after Spanish prime minister denies corruption charges.
2013	Chile	Up to 150,000 people marched through the capital, Santiago, to demand education reform. Violence broke out as some threw molotov cocktails and stones at police, who fired tear gas and water cannons. There were more than 100 arrests.
2013	India	An anti-encroachment demolition drive against illegal colonizers turned violent in Kayampur village when the Greater Noida Industrial Development Authority (GNIDA) flattened government land across three villages. An irate mob resorted to violence and pelted stones at authority personnel. Police arrested one person and lodged a case of rioting against four others.
2013	Turkey	Gezi Park riots in Istanbul turn violent.

Sources: Press sources

Merrill Lynch Global Research

Oregon State "International Water Events Database"

The Food Crises and Political Instability in North Africa and the Middle East Marco Lagi, Karla Z. Bertrand and Yaneer Bar-Yam New England Complex Systems

Institute 238 Main St., Suite 319, Cambridge, MA 02142, USA (Dated: 28 September 2011)

http://en.wikipedia.org/wiki/2005_French_riots#Summary_statistics

Explaining the African Food Riots of 2007-2008: An Empirical Analysis Julia Berazneva and David R. Lee Charles H. Dyson School of Applied Economics and Management Cornell University, Ithaca, New York March 2011

8.2 Key socio-economic indicators Egypt 2005 - 2011

Key data Egypt 2005 – 2011			
	2005	2011	Comment
Population (Source: Statistical Agency Egypt)	70 million	79 million	Although an annual growth at 1.7% is quite stable, in absolute numbers the population is growing because the group of young people is large.
Poverty (Source: Worldbank)	19.6%	25.2%	An important trigger in the increase was inflation, since many lived close to the poverty line.
Inflation (Source: Worldbank)	4.9%	26.1%	Especially important here is the inflation of food prices. Living close to the poverty line, bread soon becomes unavailable.
Food insecurity (Source: FAO)	14% in 2009	17.2%	The increase of the poor directly reflected in the rise of the food insecurity perception of the population.
Unemployment (Source: CIA Factbook)	9.5%	12.2%	The rise in unemployment is not only important in its share but also in total numbers. Egypt had a similar unemployment rate before 2005 but the population was lower at that time. Hence today a share of 12% brings more people in absolute numbers.
FAO Food Price Index (Source: FAO)	117.3	227.6	The hike in food prices – especially wheat – hit Egypt hard in 2011.

8.3 Principles for Responsible Investments (PRI)

Principle 1

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

Principle 2

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

Principle 3

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

Principle 4

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

Principle 5

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

Principle 6

We will each report on our activities and progress towards implementing the Principles.

Source: <http://www.unpri.org/about-pri/the-six-principles/>

8.4 Principles for Sustainable Insurance (PSI)

Principle 1

We will embed in our decision-making environmental, social and governance issues relevant to our insurance business.

Principle 2

We will work together with our clients and business partners to raise awareness of environmental, social and governance issues, manage risk and develop solutions.

Principle 3

We will work together with governments, regulators and other key stakeholders to promote widespread action across society on environmental, social and governance issues.

Principle 4

We will demonstrate accountability and transparency in regularly disclosing publicly our progress in implementing the Principles.

Source: http://www.unepfi.org/fileadmin/documents/PSI_document-en.pdf

8.5 External sources of information

SOURCE	E	S	G
AQUASTAT (FAO) & FAOSTAT	X	X	
Coface		X	
Environmental Performance Index Yale indicators	X		
Fraser Institute			X
Freedom House & Transparency International			X
Institute for Democracy and Electoral Assistance (IDEA)			X
International development Association	X		
International Labour Organisation		X	
International Monetary Fund		X	X
ONDD		X	
Revenue Watch Institute			X
The footprint network	X		
The World dataBank	X	X	X
UN Development Program	X	X	
UNCTAD		X	
UNDESA - Population Division and UNESCO		X	
UNFCCC	X		
United Nations Population Division		X	
World Bank Sustainability Safeguards	X	X	X
World Economic Forum		X	X
World Health Organization / UNICEF Joint Monitoring Programme		X	
World Wildlife Fund	X		

Sources: IJC (1991), Lorenz et al. (2001), Dalal-Clayton and Bass (2002)

9 Glossary of abbreviations

ESG	Environmental, Social and Governance
CRO	Chief Risk Officer
GDP	Gross Domestic Product
NGO	Non-governmental organization
PRI	Principles for Responsible Investment
PSI	Principles for Sustainable Insurance
UN	United Nations

10 References

References used for drafting this paper:

- The Global Compact, 2009. Future Proof? Embedding environmental, social and governance issues in investment markets.
- Outcomes of the Who Cares Wins Initiative 2004–2008. Available on: http://www.unglobalcompact.org/docs/news_events/8.1/who_cares_wins_29Jan09webversion.pdf
- Oregon State University, 2013. "International Water Events Database". Accessed on 03.06.2013. Available on: <http://www.transboundarywaters.orst.edu/database/interwatereventdata.html>
- Lorenz, C.M., A.J. Gilbert, and W.P. Cofino. 2001. "Environmental auditing: indicators for transboundary river management." *Environmental Management*. 28 (1): 115-129.
- Dalal-Clayton, B., and S. Bass. 2002. *Sustainable development strategies: a resource book*. Prepared for Organisation for Economic Cooperation and Development and United Nations Development Programme. London, UK: Earthscan Publications Limited. 358 p.
- IJC (International Joint Commission). 1991. *A proposed framework for developing indicators of ecosystem health for the Great Lakes region*. Council of Great Lakes Research Managers. International Joint Commission. 47 pp.
- MSCI ESG Sovereign Rating
- Beasley, B., and P. Wright. 2001. *Criteria and indicators briefing paper*. Background report prepared for the North Coast LRMP, British Columbia. 30 pp.
- Cairns, J.Jr., P.V. McCormick, and B.R. Niederlehner. 1993. "A proposed framework for developing indicators of ecosystem health." *Hydrobiologia*. 263 (1): 1-44.
- Dalal-Clayton, B., and S. Bass. 2002. *Sustainable development strategies: a resource book*. Prepared for Organisation for Economic Cooperation and Development and United Nations Development Programme. London, UK: Earthscan Publications Limited. 358 p.
- Gallopin, G.C. 1997. "Indicators and their Use: Information for Decision-Making." In *Sustainability Indicators: A Report on the Project on Indicators of Sustainable Development*, edited by B. Moldan, S. Billhartz and R. Matravars. 13-27. Chichester, UK: John Wiley and Sons.
- Gudmundsson, H. 2003. "The Policy Use of Environmental Indicators - Learning from Evaluation Research." *The Journal of Transdisciplinary Environmental Studies*. 2 (2): 1-12.
- Horsch, K. 1997. *Indicators: Definition and Use in a Results-Based Accountability System*. Cambridge, MA: Harvard Family Research Project. Available on: <http://www.hfrp.org/publications-resources/browse-our-publications/indicators-definition-and-use-in-a-results-based-accountability-system>
- Rapport, D.J., R. Costanza, and A.J. McMichael. 1998. "Assessing ecosystem health." *Trends in Ecology and Evolution*. 13 (10): 397-402.
- Smith, E.T. 2004. "Water resources criteria and indicators." *Water Resources Update*. 127 (February): 59-67.
- Swisher, M.E., S. Rezola, and J. Sterns. 2003. *Sustainable Community Development Step 4: Develop Sustainability Indicators to Measure Progress*. FCS7217-Eng. Gainesville, FL: University of Florida, IFAS Extension. 3 pp. Available on: <http://edis.ifas.ufl.edu/pdffiles/CD/CD02900.pdf>
- Winograd, M., M. Aguilar, A. Farrow, L. Segnestam, M. Linddal, and J. Dixon. 1999. *Conceptual framework to develop and use water indicators*. CIAT/The World Bank/UNEP Project, Rural Sustainability Indicators: Outlook for Central America, Technical Note. Cali, Columbia: CIAT. 12 pp. Available on: <http://siteresources.worldbank.org/INTEEI/811099-1115809852605/20486439/ConceptualFrameworktoDevelopandUseWaterIndicators1999.pdf>

Disclaimer:

Dutch law is applicable to the use of this publication. Any dispute arising out of such use will be brought before the court of Amsterdam, the Netherlands. The material and conclusions contained in this publication are for information purposes only and the editor and author(s) offer(s) no guarantee for the accuracy and completeness of its contents. All liability for the accuracy and completeness or for any damages resulting from the use of the information herein is expressly excluded. Under no circumstances shall the CRO Forum or any of its member organisations be liable for any financial or consequential loss relating to this publication. The contents of this publication are protected by copyright law. The further publication of such contents is only allowed after prior written approval of CRO Forum.

© 2013
CRO Forum



The CRO Forum is supported by a Secretariat that is run by KPMG Advisory N.V.

Laan van Langerhuize 1, 1186 DS Amstelveen, or
PO Box 74500, 1070 DB Amsterdam
The Netherlands
www.croforum.org

