Direct disaster losses are at least 50 percent higher than internationally reported figures: Total direct losses in 40 low and middle income countries amount to US$305 billion over the last 30 years; of these more than 30 percent were not internationally reported (Part I-Intro).

Disasters directly affect business performance and undermine longer-term competitiveness and sustainability: When business leaves it may never return. Prior to the 1995 earthquake, the port of Kobe was the world's sixth-busiest. Despite a massive investment in reconstruction and efforts to improve competitiveness, by 2010, it had fallen to 47th place (Chapter 1).

Globalised supply chains create new vulnerabilities: Toyota lost $1.2 billion in product revenue from the 2011 Japan earthquake and tsunami due to parts shortages that caused 150,000 fewer Toyota automobiles to be manufactured in the USA, and **reductions in production of 70% in India and 50% in China** (Chapter 1, Box 1.4).

Businesses loses its lifeline when critical infrastructure is hit: Most of the 1,300 businesses surveyed in disaster prone cities in the Americas noted **disruptions in power and water supply and telecommunications as top concerns** (Chapter 15). Over 90% of damage to these lifelines occurs in local disasters (Chapter 1).

GAR at a Glance

The "wake-up call"- disasters are even costlier than we thought

Small and medium enterprises are particularly at risk: A single disaster may wipe out all or large parts of business capital of small enterprises, in turn affecting large companies relying on local suppliers. Yet, **less than 15 percent** of companies with less than 100 employees in disaster prone cities in the Americas have a **business continuity or crisis management plan** in place (Chapter 11).

Disaster risk is a new multi-trillion dollar asset class: Global capital flows have transformed the landscape of disaster risk, creating a new pile of toxic assets for businesses and governments that do not currently appear on balance sheets (Chapter 2). Globally, US$71 trillion of assets would be exposed to one-in-250 year earthquakes. In Honduras, already a one-in-33 year disaster would create a significant financing gap for the government with impacts on future GDP (Chapter 5).

Most disasters that could occur haven't happened yet: Total expected annual global loss from earthquakes and cyclone wind damage alone now amounts to **US$180 billion per year** (Chapter 3). This figure does not include the significant cost of local disasters from floods, landslides, fires and storms (Chapter 4) or the cost of business interruption. Agriculture is also at risk: in Mozambique a one-in-10 year drought would lower maize yields by 6 percent and GDP by 0.3 percent (Chapter 6).

Risks to natural capital compromise future wealth: Disaster risks include the loss and erosion of **natural capital** with serious consequences for business, households and a country's wealth. For example, **wild-land fires** now affect all continents with global annual losses to tropical ecosystems alone potentially **reaching US$190 billion per year** (Chapter 6). Land degradation increases agricultural drought risk; in Africa, the total area with high degradation and high drought hazard is almost 260,000 square km.

It's no longer "business as usual": Recent major disasters such as Hurricane Sandy in 2012 and the 2011 floods in Thailand focused attention on the growing impact of disasters on the **private sector** (Chapter 1). Many large global businesses are now strengthening their risk management capacities. Yet, businesses still display a **'blind-spot' to disaster risk**, which is largely ignored in **economic forecasts and growth projections** (Chapter 12).

Private investment largely determines disaster risk: In most economies **70–85 percent of overall investment** is made by the **private sector**, including annual **institutional investments worth more than US$80 trillion** globally. Both regulators and investors are increasingly demanding that businesses disclose their hidden risks, including disaster risks (Chapter 12).

Insurance is critical to business resilience. Yet insurance pricing often does not reflect risk levels or provide an adequate incentive for risk sensitive business investment, particularly in low and middle income countries with low penetration rates but rapidly growing markets (Chapter 13). In China, for example, **only 3 percent of properties are insured against earthquake and 5 percent against typhoons and floods.**

Governments report significant progress in developing more **effective disaster response and preparedness strategies** and are investing more to address risks. Yet, the required shift to **anticipate risks in public and private investment** remains a challenge for most (Chapter 14). **The number of export oriented Special Economic Zones has expanded** from 176 zones in 47 countries in 1986 to 3,500 zones in 130 countries in 2006. Many such zones are located in hazard-exposed areas increasing disaster risks.

A new wave of urbanisation is unfolding in hazard-exposed countries and with it, new opportunities for resilient investment emerge. In India alone, the urban population is expected to grow from 379 million in 2010 to 606 million in 2030 and 875 million in 2050. Private construction company Mori Building has **successfully invested in earthquake resistant housing developments** in Japan, where earthquake resistance is the most important criteria for choosing new offices for 92% of businesses (Chapter 8).

Tourism investment in small island developing states comes with high levels of disaster risk – but also with large potential benefits from investment in disaster risk management: 6 of the top 10 countries with the greatest proportion of assets **at risk to cyclone wind damage are small islands** (Chapter 7). The competitiveness of these countries, and businesses invested in them will depend on **effective disaster risk management**, through for example certification programmes and voluntary rating systems (Chapter 9).

Current agribusiness practice feeds global food insecurity: Over 2 million hectares of land have been acquired through **international agribusiness investment in drought prone countries** like Ethiopia (Chapter 10). Commodity markets, bio-fuel production, increasing demand and low stocks, can transform production shortfalls due to drought into **global food price spikes**, affecting low-income households, who buy most of the food they consume. But new partnerships between small-holder farmers and businesses show potential for a more resilient agriculture.

The business case for disaster risk reduction

The business case for stronger disaster risk management is three-fold: It reduces uncertainty and strengthens confidence: Orion invested **US$6 million** in seismic protection in New Zealand that **saved the company US$65 million** (Chapter 8). It opens the door to cost savings: preventive investments by fishermen in Mexico **saved each individual entrepreneur US$35,000** during Hurricane Wilma in 2005 (Chapter 11). And it provides an avenue for value creation: an Economist Intelligence Unit survey records that **63 percent of businesses** see opportunities to generate value from disaster risk reduction (Chapter 16). Businesses that have invested the most in risk management may financially outperform their peers.

Business attitudes are changing: Embedding disaster risk management in business processes is increasingly seen as a key to resilience, competitiveness and sustainability **- a business survival kit** in an increasingly unpredictable world. One business survey now lists disaster risk as the **16th most important out of the top 50 risks, and as the 6th most important driver strengthening risk management** (Chapter 16).

A new paradigm for disaster risk governance will include the private sector: Only half the countries assessing progress against the UN framework for disaster risk reduction (Hyogo Framework for Action) report on active engagement with business on disaster risk management. Canada is a notable exception with **20 private sector bodies represented** on its national platform (Chapter 15).

From managing “disasters” to managing “risks”

Creating shared value through disaster risk management: Most businesses are currently addressing disaster risk through the paradigm of **business continuity planning.** While essential, this is **only one part** of building resilient investments to disaster risk management. Important further steps are integrating disaster **risk information into investment decisions;** building **public-private** risk governance and **disclosing disaster risks and costs** on business balance sheets (Chapter 15). Innovative companies are beginning to move in this direction, identifying disaster hot spots in their supply chains, reporting on risk reduction measures and forging partnerships with municipal governments.

Disaster risk management is a **business opportunity:** The development of new crop-insurance products or more disaster resilient infrastructure **expands existing and opens up new markets,** particularly in emerging economies (Chapter 16). Companies are recognizing this and beginning to invest in the development of products and services in support of disaster risk management.

As we now approach 2015, international efforts are intensifying to formulate a **new framework for disaster risk reduction.** Ensuring that the business case for disaster risk reduction is explicitly included in that framework will provide a critical incentive for the **constructive engagement by business on which future resilience, competitiveness and sustainability depend.**