### RISK&INSURANCE WEBINARS

### How to Protect Your Global Supply Chain

Webinar Start Time: 1:00pm EDT

Please be sure to have the volume turned up on your computer to hear the audio for this webinar

**Sponsored By:** 

Insurance Evolved

### **Webex Information**

- Be sure to have the volume turned up on your computer to hear the audio for this webinar.
- If you are having problems hearing the audio through your computer, please click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.
- To ask a question about the content of the presentation during the event, you may use the Q&A panel located in the bottom right corner of your screen. We'll be leaving time at the end of the presentation to answer them.
- Within 48 hours, a link to an archive version of the presentation will be e-mailed to you.
- A copy of the slides will be posted at www.riskandinsurance.com.
- If you encounter a problem during today's Webinar, please send us a message in the chat box located on the right column of your screen. Or feel free to contact Webex Technical Support at (866) 229-3239.



Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Thank You To Our Sponsor**



Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **FM Global**

For more than 175 years, many of the world's largest organizations have turned to FM Global to develop costeffective property insurance and engineering solutions to protect their business operations from fire, natural disasters and other types of property risk. We form longterm partnerships with our clients to support risk management objectives through a unique combination of engineering, underwriting and claims.

For more information about FM Global's unrivaled products and services, visit www.fmglobal.com.

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.







#### **Robert Hartwig**

President Insurance Information Institute





#### **Paul Bomberger**

Editor-In-Chief *Risk & Insurance*®



**Sponsored By:** 

Insurance Evolved

#### **Chris Johnson**

Senior Vice President FM Global

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Presentation Outline**

- Categorizing Supply Chain Disruption Threats
- Recent World Events as Examples of the Need to Protect Against Supply Chain Disruption
  - Earthquakes, Resurgent Terrorism Threats, Tornadoes, Hurricanes...
- Risk and the New World Economic Order
  - Globalization
  - Extended Supply Chains
  - Outsourcing
  - Shifting Trade Patterns
  - Economic and Political Instability
- The Unfortunate Nexus: Opportunity, Risk & Instability
  - Future growth is necessarily fraught with greater risk
- Solutions for Managing Supply Chain Disruption

Sponsored By: Insurance Evolved FM 61083

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.





### Categorizing Supply Chain Disruption Threats

# The Longer the Chain, the Greater the Likelihood of a Weak Link

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Reasons Why Supply Chains Are Under More Stress than Ever

- Increased Use of Global Supply Networks
- Increased Use of Outsourcing
- Use of Just-in-Time Inventory Techniques
- Rising Number of Natural Catastrophes Globally
- Increased Geo-Political Instability
- Economic Weakness of Business Partners

Sponsored By: Insurance Evolved FM Global

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Causes of Supply Chain Disruptions**

**Natural Disasters** 

**Industrial Accidents** 

Labor Issues (strikes, shortages)

**Production Process Problems** 

Political Upheaval, War, Civil Strife

**Trade Disputes** 

Health & Safety Concerns

**Credit/Cash Flow Problems** 

**Supplier Finances/Solvency** 

There are solutions for most causes of supply chain disruptions that can reduce their severity

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.





### Recent Events Illustrate the Need to Protect Against Supply Chain Disruption

### Is the World Becoming a Riskier Place?

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Uncertainty, Risk and Fear Abound**

- Japan, New Zealand, Haiti, Chile Earthquakes
- Record Flooding Along the Mississippi River
- Record Tornado Activity in the US
- Volcanic Ash In Europe
- Political Upheaval in the Middle East
- Resurgent Terrorism Risk (e.g., Bin Laden Killing)
- Manmade Disasters (e.g., Deepwater Horizon)

#### If We Choose to View Everything as a "Black Swan" then We Consign Ourselves to be Victims



Are "Black Swans" everywhere or does it just seem that way?

Sponsored By: Insurance Evolved FM 61083

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.





### Terrorism, Insurance and Business Interruption

### The Killing of Bin Laden Serves as Reminder of the Importance in Protecting the Supply Chain

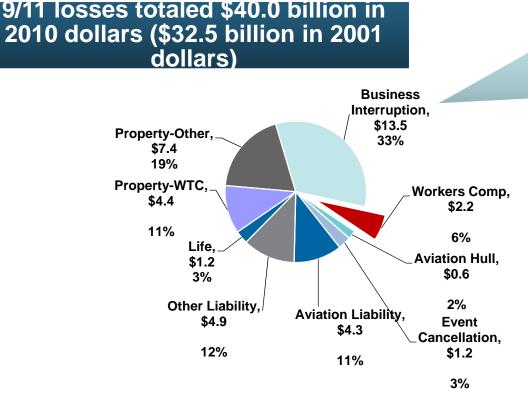
Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Distribution of Insured September 11 Losses by Line (\$ Billions, 2009 Dollars)**



9/11 remains the largest insured loss in global history until Hurricane Katrina in 2005. Fully 1/3 of the 9/11 insured losses were related to Business Interruption

(1) Loss total does not include NYC March 2010 settlement of up to \$657.5 million to compensate about 10,000 Ground Zero workers.

(2) Sum of segment totals may not equal overall total due to rounding. Adjusted to 2010 dollars using the Bureau of Labor Statistics (BLS) Inflation Calculator.

Sources: Insurance Information Institute research.



#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Insured Loss Estimates: Truck Bomb Terrorist Attack (\$ Bill)

Type of Coverage	New York	Washington	San Francisco	Des Moines
Group Life	\$0.3	\$0.2	\$0.3	\$0.1
General Liability	1.2	0.4	0.7	0.2
Workers Comp	3.5	2.8	3.9	1.5
Residential Prop.	0.0	0.0	0.0	0.0
Commercial Prop.	6.8	2.1	3.9	1.2
Auto	0.0	0.0	0.0	0.0
TOTAL	\$11.8	\$5.5	\$8.8	\$3.0

#### Supply Chain Disruptions Arising from Events Much Smaller than 9/11 Can Still Be Very Disruptive

#### Source: American Academy of Actuaries, Response to President's Working Group, Appendix II, April 26, 2006.

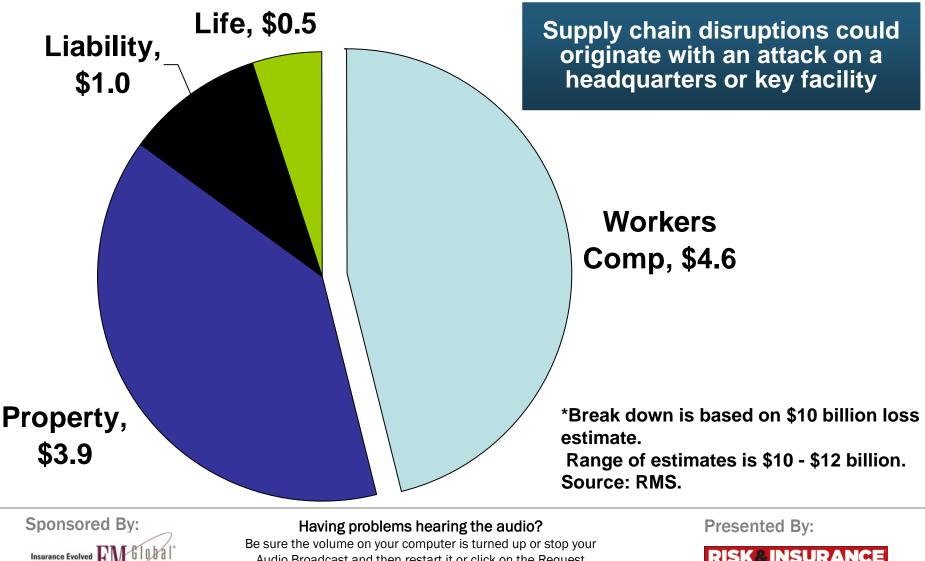


#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Potential Insured Losses from Terrorist Attack on Major Corporate HQ in Houston



Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.





# Summary of Japan Earthquake & Impacts on US P/C Markets

### The March 11 Quake & Other Major CATs Are Big Events that Caused Massive Supply Chain Disruptions

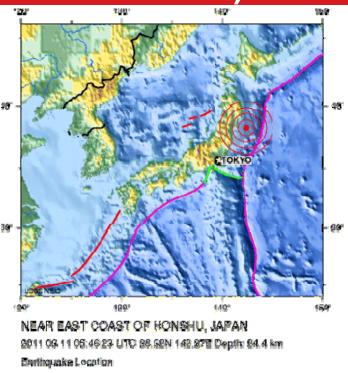
Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Location of March 11, 2011 Earthquake Near Sendai, Honshu, Japan



#### LOCATION

130 km (80 miles) E of Sendai, Honshu, Japan
178 km (110 miles) E of Yamagata, Honshu, Japan
178 km (110 miles) ENE of Fukushima, Honshu, Japan
373 km (231 miles) NE of TOKYO, Japan

Source: US Geological Service; Insurance Information Institute.

#### March 11 Earthquake Facts as of 4/21/2011

- Magnitude 9.0 earthquake struck Japan at 2:46PM local time (2:46AM Eastern) off northeast coast of Honshu, 80 miles east of Sendai
- Quake is among the 5 strongest in recorded history and the strongest in the 140 years for which records have been kept in Japan
- 12,000+ fatalities
- Economic loss: \$100 \$300 bn
- Insured losses up to \$45 bn
- Fukushima Nuclear Plant threat level raised to Category 7 on April 11 (highest, same as Chernobyl)
- Significant tsunami damage was recorded in Japan; relatively minor damage on the U.S. West Coast

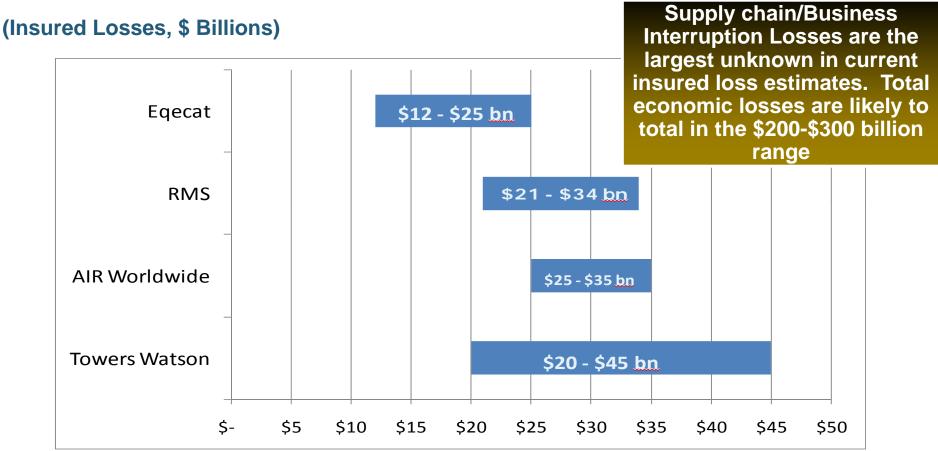
Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Insured Japan Earthquake Loss Estimates\*



\*As of April 21, 2011. Towers Watson estimate includes \$3.0 (low) to \$4.9 billion (high) in life insurance losses. RMS estimate includes insured life/health losses of \$3 to \$8 billion.

Sources: AIR Worldwide, Eqecat, RMS, Towers Perrin; Insurance Information Institute.



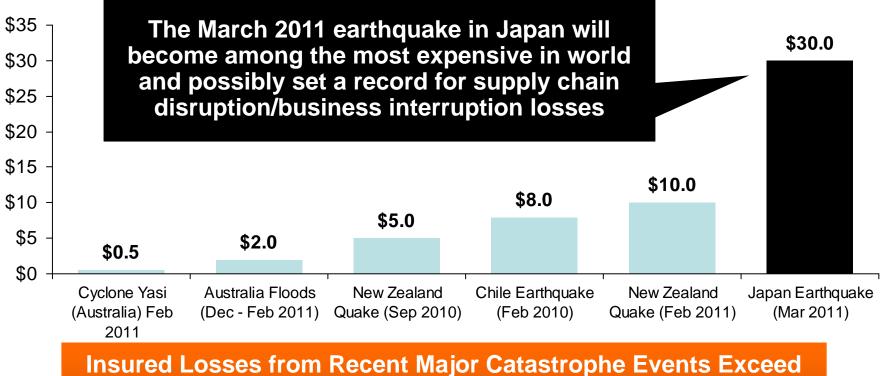
#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Recent Major Catastrophe Losses**

#### (Insured Losses, \$US Billions)



\$55 Billion, an Estimated \$53 Billion of that from Earthquakes

Sources: Insurance Council of Australia, Munich Re, AIR Worldwide; Insurance Information Institute.

Sponsored By: Insurance Evolved FM 610881

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Example Supply Chain Disruptions Arising from the Japan Quake/Tsunami

- Automobiles
  - Plants around the world idled or operating at reduced capacity
- Auto Parts
- Electronic Devices
- Electronic Components
  - Parts, chips, processors, etc.
- Specialty Chemicals

The Australian floods caused major disruptions in coal exports, affecting Asian power plants' ability to generate electricity

- Agricultural Commodities
- Shipping Capacity

Sponsored By: Insurance Evolved FM 610831

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.





### Summary of April 2011 Tornado Outbreak

### **Recent Severe Tornadoes Have Caused Supply Chain Problems**

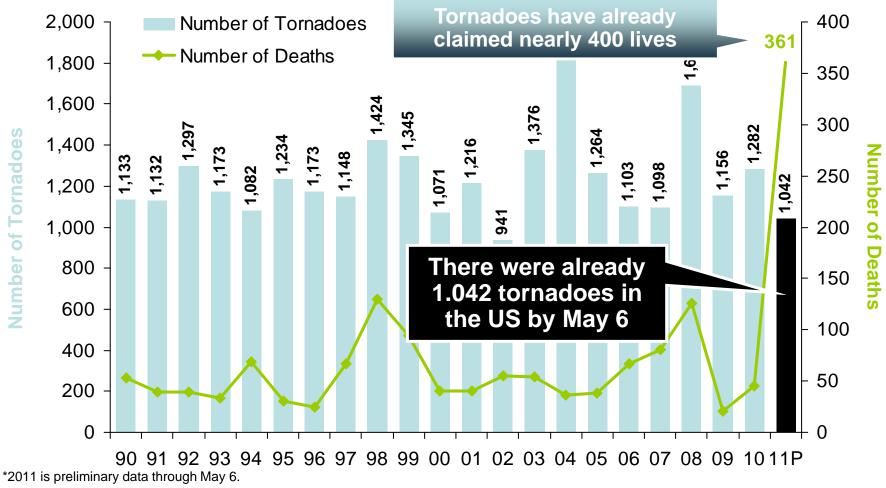
Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Number of Tornadoes and Related Deaths, 1990 – 2011\*



Source: U.S. Department of Commerce, Storm Prediction Center, National Weather Service.

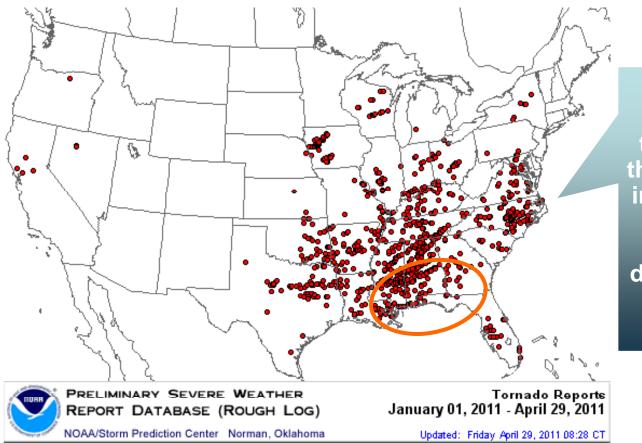
Sponsored By: Insurance Evolved FM 610231

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Location of Tornadoes in the US, January 1—April 29, 2011



877 tornadoes had killed more than 400 people through late April, including at least 340 on April 26, the second deadliest tornado outbreak in US history

Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2011\_annual\_summary.html#

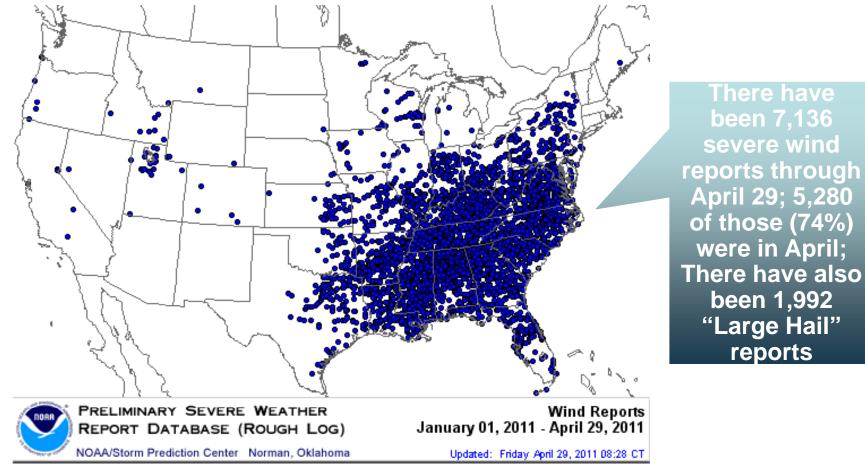
Sponsored By: Insurance Evolved FM 610831

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Severe Wind Reports, January 1—April 29, 2011



Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2011\_annual\_summary.html#

Sponsored By: Insurance Evolved FM 610831"

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.





### Outlook Is for a Severe 2011 Atlantic Hurricane Season

### Hurricane Katrina Caused Enormous and Long-Lasting Supply Chain Disruptions;

### Will History Repeat Itself in 2011?

Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Outlook for 2011 Hurricane Season: 75% More Active Than Average

	Average*	2005 (Katrina Year)	2011F
Named Storms	9.6	28	16
Named Storm Days	49.1	115.5	80
Hurricanes	5.9	14	9
Hurricane Days	24.5	47.5	35
Intense Hurricanes	2.3	7	5
Intense Hurricane Days	5.0	7	10
Accumulated Cyclone Energy	96.1	NA	160
Net Tropical Cyclone Activity	100%	275%	175%

\*Average over the period 1950-2000. Source: Dr. Philip Klotzbach and Dr. William Gray, Colorado State University, April 6, 2011.



#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Probability of Major Hurricane Landfall (CAT 3, 4, 5) in 2011

	Average*	2011F			
Entire US Coast	52%	72%			
US East Coast Including Florida Peninsula	31%	48%			
Gulf Coast from FL Panhandle to Brownsville, TX	30%	47%			
ALSOAbove-Average Major Hurricane					
Landfall Risk in Caribbean for 2011 (61% vs. 42%)					

\*Average over the period 1950-2000. Source: Dr. Philip Klotzbach and Dr. William Gray, Colorado State University, April 6, 2011.

Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.





### Global Catastrophe Losses Have Interrupted Trade Flows

### Infrastructure, Transportation Networks, Facility Damage and Destruction

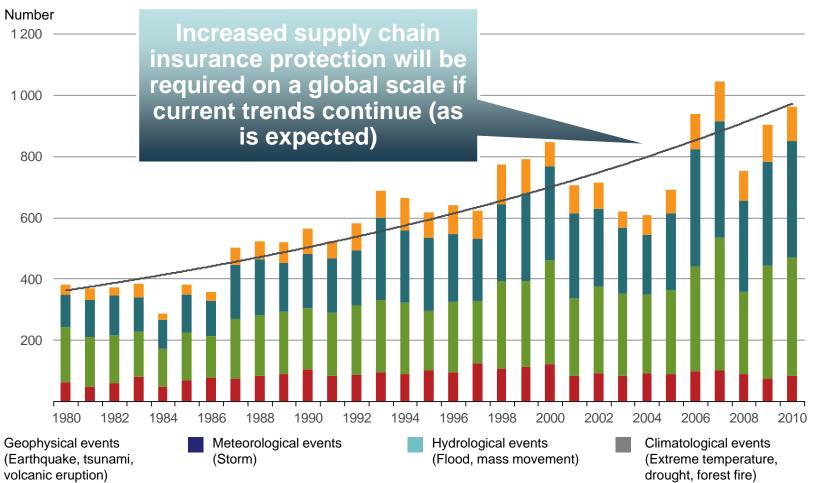
Sponsored By: Insurance Evolved FM 610431

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Natural Catastrophes Worldwide, 1980–2010 (Number of events with trend)



Source: Geo Risks Research, NatCatSERVICE.

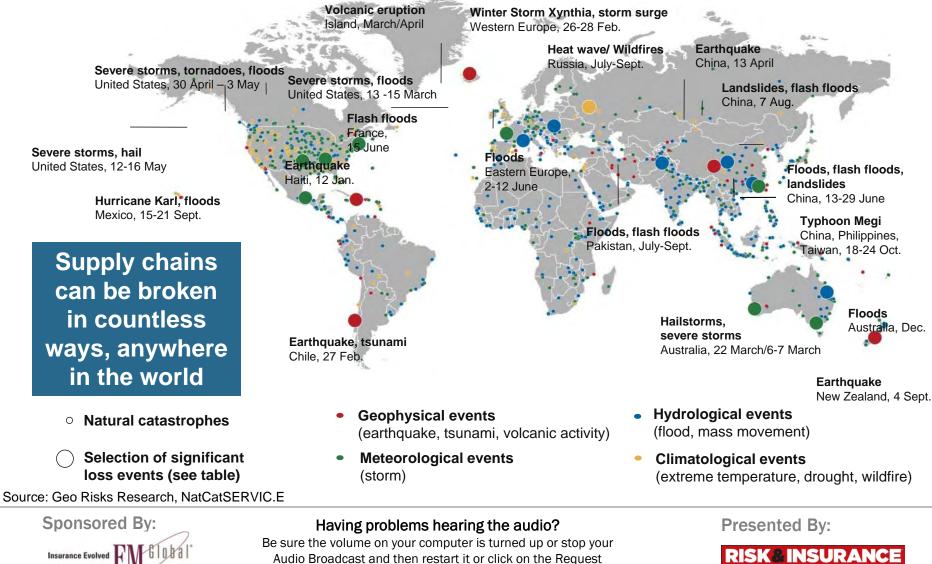


#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right oping of the Screen.



### Natural Catastrophes, 2010 950 loss events



Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Significant Natural Catastrophes: 1980 – February 2011

#### 10 Costliest Events Ordered by Overall Losses

Devied	E		Overall	losses	Insured losses	
Period	Event	Affected Area	US\$ m, original values			Fatalities
25-30.8.2005	Hurricane Katrina	USA: LA, New Orleans, Slidell; MS, Biloxi, Pascagoula, Waveland, Gulfport	(	125,000	62,200	1,300
17.1.1995	Earthquake	Japan: Hyogo, Kobe, Osaka, Kyoto		100,000	3,000	6,400
12.5.2008	Earthquake	China: Sichuan, Mianyang, Beichuan, Wenchuan, Shifang, Chengdu, Guangyuan, Ngawa, Ya'an		85,000	300	84,000
17.1.1994	Earthquake	USA: Northridge, Los Angeles, San Fernando Valley, Ventura, Orange		44,000	15,300	60
6-14.9.2008	Hurricane Ike	USA. Cuba. Haiti. Dominican Republic. Turks and Caicos Islands. Bahamas	7	38,300	18,500	170
May-Sept. 1998	Floods	China: Jangtsekiang, Songhua Jiang		30,700	1,000	4,200
27.2.2010	Earthquake, tsunam	i Chile: Bio Bio, Concepción, Talcahuano, Coronel Dichato, Chillán; Del Maule, Talca, Curicó		30,000	8,000	520
23.10.2004	Earthquake	Japan: Honshu, Niigata, Ojiya, Tokyo, Nagaok Yamakoshi		28,000	760	50
23-27.8.1992	Hurricane And	USA: FL, Homestead; LA. Bahamas		26,500	17,000	60
27.6-13.8.1996	Floods	na: Guizhou, esp. Guiyang; Zhejiang n; Anhui; Jiangxi; Hubei; Guangxi		24,000	445	3,050

#### About 50% of the industrial losses paid in Chile were for business interruption.

There is a large gap between overall economic and insured losses which could be narrowed if supply chain disruptions were more adequately insured

© Munich Re, Geo Risks Research, NatCatSERVICE - As at 11 March 2011.



#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



## Natural Catastrophes, 2010 Overview & comparison with previous years

	2010	2009	Average of the last 10 years 2000-2009	Average of the last 30 years 1980-2009	
Number of events	950	900	785	615	
Overall losses (US\$m)	130,000	60,000	110,000	95,000	
Insured losses (US\$m)	37,000	22,000	35,000	23,000	
Fatalities	295,000	11,000	77,000	66,000	
Overall losses in 2010 were more than 3 times insured losses. Insuring against supply chain disruption can narrow that gap.					
Sponsored By:       Having problems hearing the audio?       Presented By:         Insurance Evolved FM fileFall       Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request       Presented By:					

Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.

VEBINARS



### Risk and the New World Economic Order

### Future Growth Will Be More Challenging/Risky

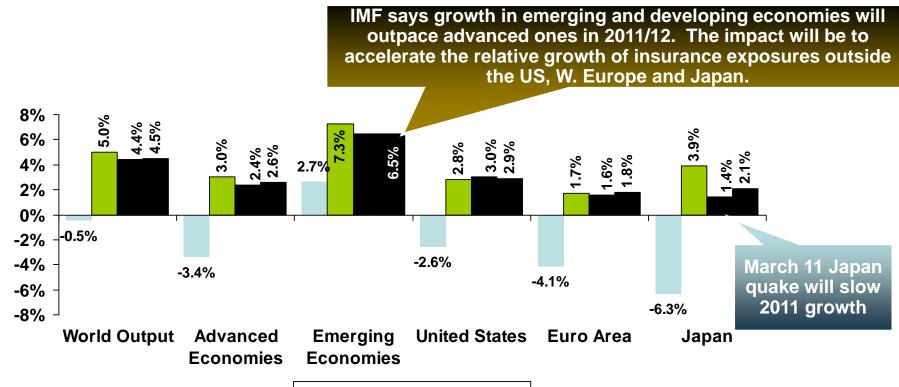
Sponsored By: Insurance Evolved FM 610431

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### World Economic Outlook: 2009-2012F



■ 2009 ■ 2010 ■ 2011F ■ 2012F

Outlook uncertain: The world economy continues to recover from the global economics, but activity is reviving at different speeds in different parts of the world, according to the IMF. A clear set of "winners" has emerged with direct implications for all industries and their insurers.

Sources: IMF, World Economic Outlook, Apr. 2011; Insurance Information Institute.

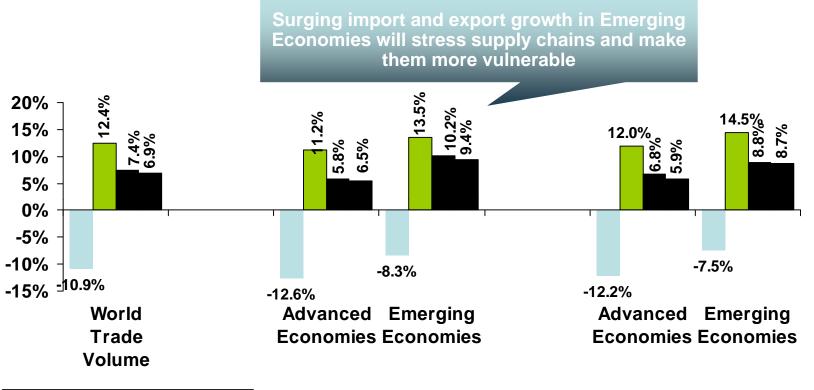
Sponsored By: Insurance Evolved FM GIODAI

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



# World Trade Volume Outlook (Goods and Services): 2009-2012F



2009 ■ 2010 ■ 2011F ■ 2012F

IMPORTS

#### **EXPORTS**

Rising global trade flows illustrate both the vulnerability and need to insure supply chain exposures. Import and export growth is stronger in emerging economies.

Sources: IMF, World Economic Outlook, Apr. 2011; Insurance Information Institute.

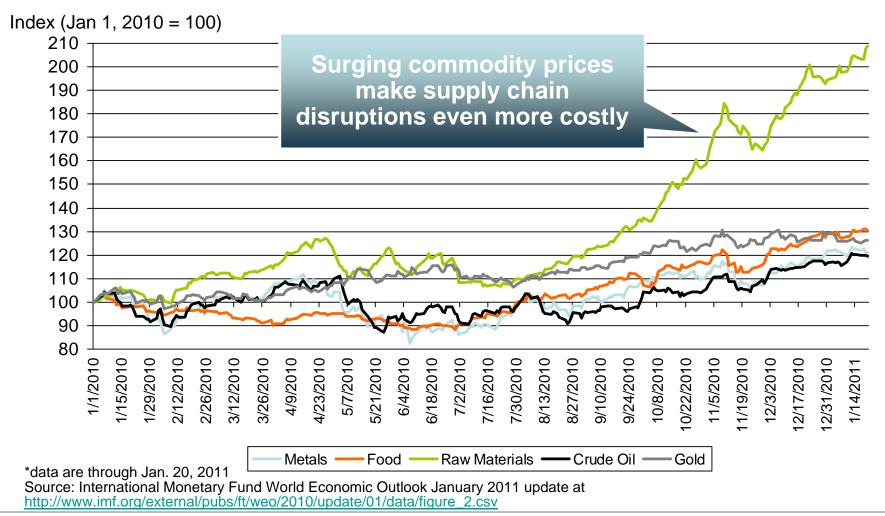


#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Commodity Price Changes in 2010-2011\***



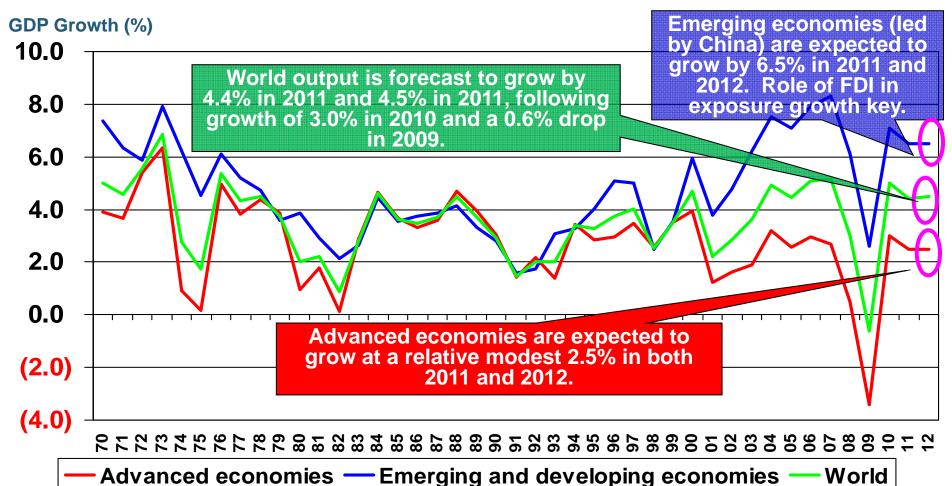
Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### GDP Growth: Advanced & Emerging Economies vs. World, 1970-2012F



Source: International Monetary Fund, World Economic Outlook Update, January 2011; Ins. Info. Institute.

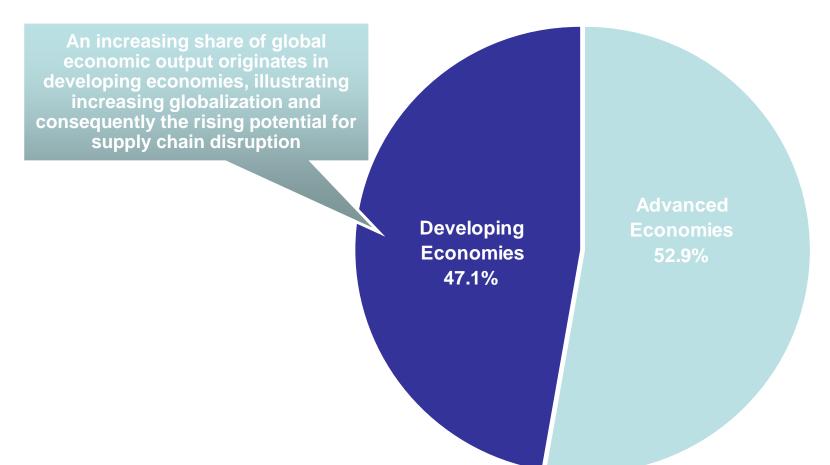
Sponsored By: Insurance Evolved FM 61083

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Relative Shares of Global Output, Advanced vs. Developing Economies, 2009



Source: EDC Economics, "The Moment of Truth: Global Export Forecast Fall 2010, at http://www.edc.ca/english/docs/gef e.pdf



#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.





## The Unfortunate Nexus: Opportunity, Risk & Instability

### Most of the Global Economy's Future Gains Will be Fraught with Much Greater Risk and Uncertainty than in the Past—Insurance Is There to Help

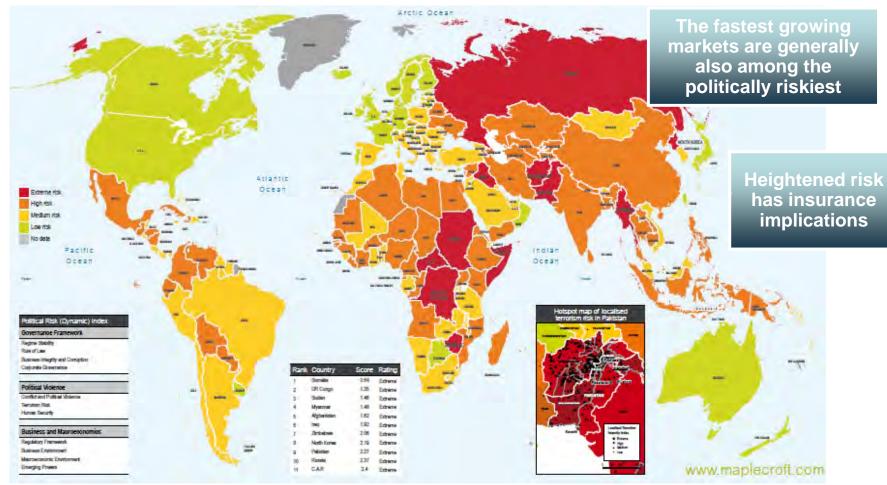
Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Political Risk in 2010: Greatest Business Opportunities Are Often in Risky Nations**



#### Source: Maplecroft



#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.





## Solutions for Managing Supply Chain Disruptions

### Basic but Thorough Risk Management Techniques Must Be Employed

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### Risk Management Techniques for Managing Supply Chain Disruptions

#### Identification of Risk

- Conduct thorough supply chain mapping exercise
- Look at processes as they come together to create final products
- Look in reverse: starting with where profits are generated and work backwards to identify greatest financial threats

#### Avoidance

- Remove the threat of exposure to the supply chain

#### Mitigation

Reduce the threat associated with exposures

#### Manage

Includes transfer of risk through insurance

Sponsored By: Insurance Evolved FM 61083

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.







#### **Robert Hartwig**

President Insurance Information Institute





#### **Paul Bomberger**

Editor-In-Chief *Risk & Insurance*®



**Sponsored By:** 

Insurance Evolved

#### **Chris Johnson**

Senior Vice President FM Global

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



- Over 50% of Fortune 500 profit now comes from overseas
- Supply chains have become more complex, extending to tertiary levels and beyond
- Demographic change has placed more business in harm's way
- We are in a truly intertwined global economy
- Catastrophe events are having deeper impact

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



# "60-70% of a firm's cost is typically controlled by the extended supply chain."

 "Supply Chain Risk: It's Time to Measure It", Harvard Business Review Blog, Feb 5, 2010

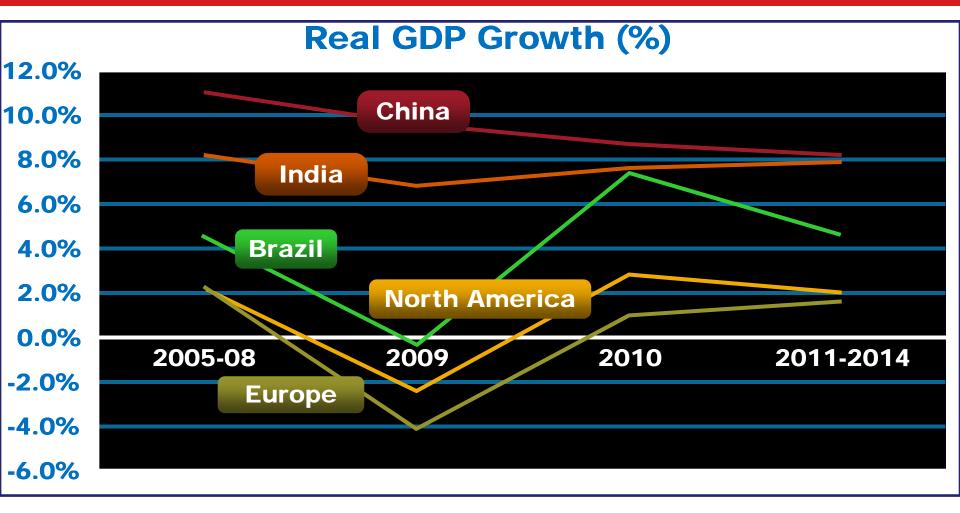
Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Emerging Market Opportunities**



Sponsored By:

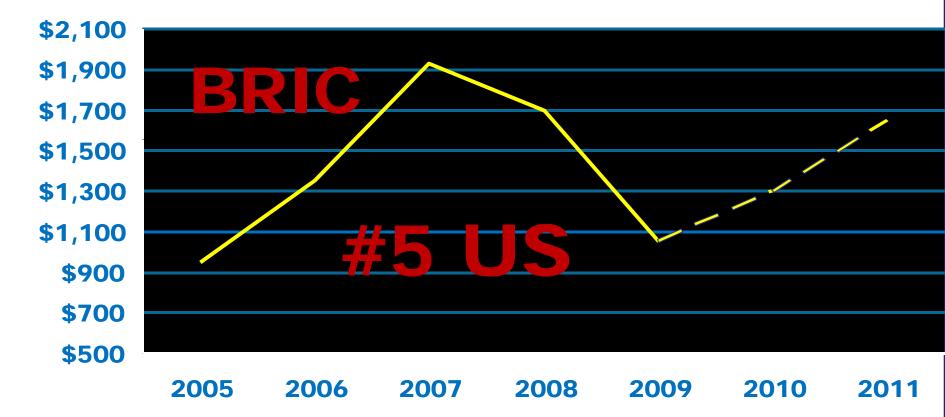
#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Foreign Direct Investment Grows**

#### Global FDI Flows 2005-2011



#### Source: UNITAD, World Investment Report 2009



Having problems hearing the audio?

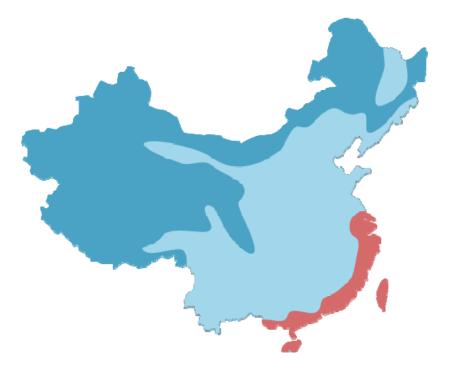
Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **The Challenge: Risk**

Outsourcing operations ≠ Outsourcing risk





Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



#### **Future: Two Trading Blocks**

### Primary, Secondary



#### Tertiary, High Tech



Sponsored By: Insurance Evolved FM 610831

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Evolution Never Errs To Simplicity**



Sponsored By: Insurance Evolved FM 610431

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



# Implication Interdependency & Complexity



Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



"Nearly 90 percent of firms do not conduct a risk assessment when outsourcing production."

"Supply Chain Risk: It's Time to Measure It," Harvard Business Review Blog, Feb 5, 2010



Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



#### **A Timely Reminder**

# • "An ounce of prevention is worth a pound of cure."

Sponsored By: Insurance Evolved FM 61083

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



#### **FM Global's Belief**

• The majority of property loss is preventable, even in supply chains.



Sponsored By: Insurance Evolved FM 61043

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



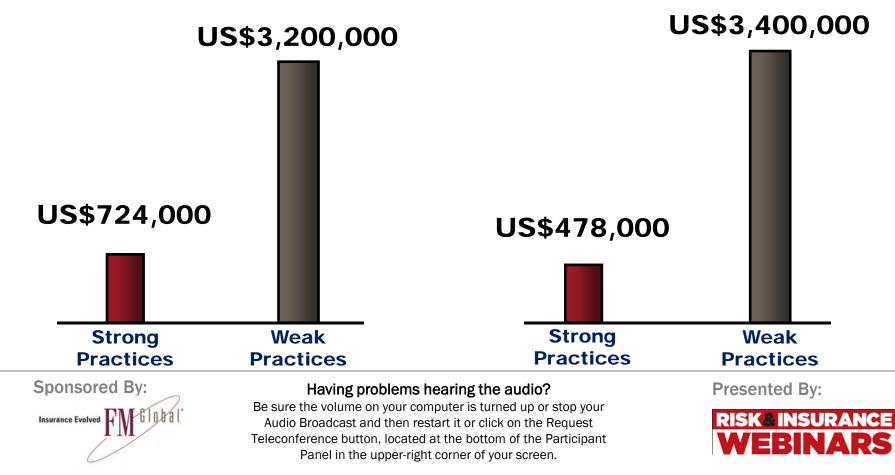
### **The Consequences Can Be Dire**

#### Fire

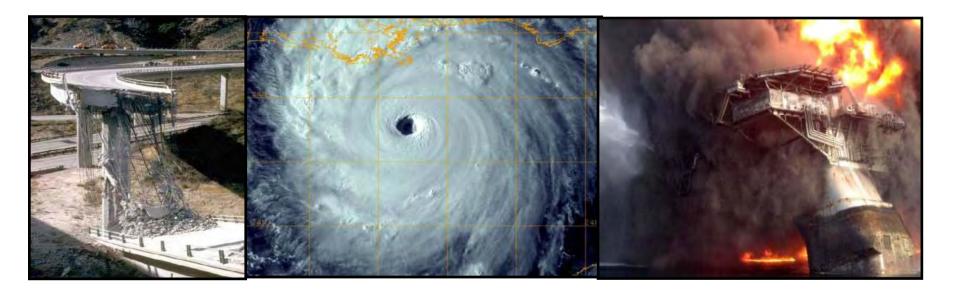
Physical Risk Management Practices versus Ave. Loss Severity (2005-08)

#### **Natural Catastrophes**

Physical Risk Management Practices versus Average Loss Severity (2005-08)



Instead of trying to anticipate low-probability, highimpact events, we should reduce our vulnerability to them.



Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Resiliency = Competitive Advantage**



Sponsored By:

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



#### Solutions

- Avoid or mitigate the supply chain exposures
- Manage the financial impact
- Seize the opportunity

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Avoid or Mitigate the Interruption**

- Thoroughly understand your supply chain at every tier loss control and business impact analysis
- Map the manufacturing process
- Identify weaknesses
- Harden facilities, owned or otherwise
- Duplicate if necessary
- Overlay with financial mapping
- Define acceptable risk
- Create contingency and disaster plans

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Avoid or Mitigate the Interruption**

- Requires top level commitment
- Must engage multiple disciplines
  - Governance
  - Risk tolerance
  - Finance and balance sheet considerations
  - Manufacturing

- Logistics
- Sales and Marketing
- Human Resources
- Risk Management
- And More!



#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Risk Transfer Products**

- Part of the solution
- Insurance product is evolving
- Traditionally, physical damage, business interruption, CTE
- Business Interruption, two flavors
  - Gross earnings
  - Gross profits
- CTE Typically direct and/or named, first tier

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Risk Transfer**

- Solutions continue to be created
  - Broad master global insurance policy (DIC & DIL)
  - First party property coverage
  - Time element select/extended period of liability
  - Contingent time element
  - Contingent time element extended

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **Risk Transfer (continued)**

- Solutions continue to be created (cont.)
  - Service interruption
  - On premises services
  - Civil or military authority (typically 30 days/5 miles)
  - Ingress/egress
  - Computer systems physical/non physical damage

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



### **The Opportunity**

- Own and manage the risk
- Understand the exposures
- Harden the supply chain, owned and non-owned
- With knowledge of the exposures, tailored supply chain insurance solutions can be created

Together these steps create:

**COMPETITIVE ADVANTAGE** 

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



#### Questions



Sponsored By: Insurance Evolved FM 610431

#### Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.



#### **FM Global**

For more than 175 years, many of the world's largest organizations have turned to FM Global to develop costeffective property insurance and engineering solutions to protect their business operations from fire, natural disasters and other types of property risk. We form longterm partnerships with our clients to support risk management objectives through a unique combination of engineering, underwriting and claims.

For more information about FM Global's unrivaled products and services, visit www.fmglobal.com.

Sponsored By:

Having problems hearing the audio?

Be sure the volume on your computer is turned up or stop your Audio Broadcast and then restart it or click on the Request Teleconference button, located at the bottom of the Participant Panel in the upper-right corner of your screen.

