GLOBAL RISK

New Perspectives and Opportunities

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Executive Summary

The global financial and economic crisis has heightened everyone's awareness of systemic risk. Confidence in the ability of decision-makers, policymakers and institutions to handle such risks has been shattered. Psychology, a culture of destructive self-interest, and social processes have also been invoked as part of a complex set of conditions that led to the debacle. In turn, the crisis has accelerated some prevailing demographic, economic, and social trends, including population aging, political tensions, geopolitical instability and environmental degradation, as the focus of attention has unavoidably shifted towards short-term, immediate concerns. The crisis has placed the issue of systemic risk at the top of the global agenda, forcing analysts and policymakers to make a stark distinction between what is important and what is actually urgent.

In this white paper we provide an overview of the causes, consequences, and potential solutions to the problem of risk, focusing on economic and financial aspects, while also paying attention to political, social and environmental risks associated with the crisis and its aftermath. The analysis represents the outcome of a collective, multi-disciplinary effort at understanding risk by a group of more than 30 scholars and policymakers from around the world who gathered in Philadelphia for a two-day conference.

The analysis begins with the conventional explanations of the crisis, further adding political considerations, institutional constraints, psychology, and social processes. This prepares the stage for the assessment of the effectiveness of policy interventions during the crisis which, while averting a massive meltdown, generated a number of additional problems, both short-term and long-term. Failures in global governance and in understanding complex ripple effects are also explored. Risks building up in emerging economies—from financial to political and demographic—are presented as a stark reminder that global instability is punctuated by a growing number of troubled hot spots.

The conference participants identified four action items. First, global governance needs to be enhanced, a task that is not easy as a changing of the guard takes place due to the ascendancy of the emerging economies. Second, regulation must both set parameters for self-regulation and establish a set of cushions, bells and whistles to ameliorate the possibility of further systemic crises. Third, policymakers and scholars ought to adopt a more humble attitude in terms of the extent to which they are able to understand and overcome the complexities posed by crises. And fourth, as people adopt shorter time horizons due to incentives, demographics, politics, and cognitive biases, it is important to remain on the alert for the weaknesses and faults in the global economic, political, and social architecture.

Introduction

Crises represent opportunities for self-reflection. *Systemic* crises invite us to revisit our most ingrained assumptions, habits, and reflexive reactions to events. The recent economic and financial crisis is as systemic as a crisis can be. Perhaps its most devastating effect is that it has shaken our belief in the efficacy of both markets and government policy. It also represents a stark reminder of the importance of trust and confidence as the key foundations of all economic and social life. Human frailties and self-destructive behavior have also played a role, as have other psychological and social processes such as cognitive biases, hubris, and social contagion. Many observers have identified the culture of self-interest and indulgence as a contributor to the crisis. Others have highlighted more macro issues such as growing global financial imbalances, the lack of effective governance institutions, and the wave of indiscriminate deregulation that preceded the crisis. This bewildering array of contributing factors begs for a truly multidisciplinary approach to the analysis of the various kinds of risks that have the potential—alone or in combination—to bring about a crisis such as the one the world has just experienced.

Systemic crises affecting a large number of sectors of economic and social activity across many countries exhibit another important feature. They throw prevailing trends into new light. Developments such as population aging, the rise of emerging economies, geopolitical instability or the race for natural resources are not new phenomena, but the crisis has exposed unprecedented and potentially systemic interconnections among them. More fundamentally, there is a growing recognition that economic, cultural, political and social dynamics are part of an intricate web of cause-effect relationships that needs to be thoroughly understood in order to arrive at a set of corrective courses of action and a catalogue of potential future threats. The crisis has put the analysis and management of risks at the top of the global agenda, and forced all of us to make the distinction between what is important and what is actually urgent when it comes to avoiding similar situations in the future.

Thus, this crisis continues to pose systemic risks not only because it has spread across markets and countries, but also because it brings to the fore complex interactions among economic, financial, political, demographic, psychological, sociological, and environmental factors. While in this white paper we begin by addressing economic and financial aspects, we incorporate other types of risks into the analysis insofar as they help define the global context in which the crisis unfolded. It is precisely at the intersection of different types of systemic risks that a multi-disciplinary approach helps overcome the shortcomings of past approaches, for several reasons. First, we need to approach human behavior—individually and in groups and organizations—from a variety of perspectives and making different assumptions as to the nature and impact of preferences, cognitive biases and culture. Second, we need to cast a wide net over the spectrum of potential systemic interactions drawing on the different disciplines, especially because truly systemic crises are relatively rare events. And third, we need to develop mechanisms for inter-disciplinary learning and sharing.

The economic and financial crisis has made us keenly aware of the potentially devastating consequences of systemic disruptions. The catalogue of threats to the stability and functioning of human societies has unfortunately increased as a result of globalization and of the growth in scale and complexity of human undertakings. The activities of corporations, governments, and markets are felt at the local level throughout the world in ways that reflect the overall pattern of systemic interaction. In the introduction to the conference, co-organizer Witold Henisz, Deloitte & Touche Associate Professor of Management at the Wharton School, noted that in order to gain insight into the crisis, we need to analyze the behavior of individual actors driven by economic and psychological incentives who make decisions under conditions of enormous uncertainty. These actors are organized in teams or groups and compete for resources and returns against peers in other units in the same organization and in peer organizations. This competition is coordinated by the management of each organization ostensibly to maximize organizational profits. This management is, however, itself operating under uncertainty and driven by economic and psychological incentives, so much so that coordination is imperfect. Further coordination occurs in the public sector to avoid abuses of market power but once again that coordination is imperfect due to the limits on human cognition and, at times, the short-term personal incentives and ideologies of politicians and regulators. We thus require insight from psychology, economics, sociology and political science along with guidance as to what is practically feasible from policymakers and managers.


Witold Henisz

It is in this multidisciplinary spirit that this report on the first Globalization TrendLab seeks to identify the risks whose materialization led to the crisis, take stock of the lessons learned by academics and policymakers as observers and action-oriented participants, and anticipate the main future threats. We are interested in laying the foundations for a more comprehensive view of global risks spanning the social sciences, and in offering fresh perspectives on global risk prevention and management, using the recent crisis as a focusing event. Our multi-disciplinary approach calls for the application of diverse methodologies and knowledge to the practical problems facing the world. Our goal is to encourage other scholars, policymakers and observers in general to take our analysis as the starting point of a continuing debate about global risks and crises, building on a broader set of assumptions about human behavior and a recognition of the relevance of politics, institutions, and social processes to the understanding of stability and crises, and to formulating the remedies to address them.

How We Got Here

Conventional Wisdom

The Financial Crisis Inquiry Commission, charged by the U.S. Congress to investigate and lay out the causes behind the crisis, identified broad failures in financial regulation and corporate governance, as well as high levels of debt and risk-taking in the household sector and on Wall Street, as the key factors behind the financial implosion. The Commission also pointed to poor preparation by policymakers for such an event; lack of accountability; and even breaches of ethics. While the Commission's report was comprehensive, dissenters argued that it was in fact too expansive. In other words, by indicting everyone, the report had, essentially, indicted no one at all.

Some commissioners wrote notes of dissent claiming that the causes of the crisis were indeed numerous but not as many as the Commission had concluded. They called out certain factors as being more important than others, and noted that other factors mentioned in the report were of no relevance to the crisis. One commissioner pointed the finger solely at the housing bubble, claiming that government mandates for affordable housing were to blame for the rise of low-quality mortgages and the consequences that followed.

Such disagreement is not surprising, given the complexity of the issues involved and the fact that the crisis was global in nature. Panelists at the conference generally agreed that multiple factors were at play; however, like the commissioners, they too had different opinions about which ones were more important or consequential. Many would like to believe that the crisis can be attributed to bad policies, regulation, practices, models or people. Such policy failures, regulatory gaps, operational weaknesses, formulas, or behaviors are relatively easy to correct. Others point to a need for deeper institutional change to address the rise of new financial instruments in an increasingly integrated and interdependent global economy.

Stijn Claessens, assistant director of the research department at the International Monetary Fund, offered an economic and historical viewpoint, noting many similarities between what happened in the current crisis and what was observed in past downturns. He pointed to asset price bubbles, this time occurring in housing; a credit boom, this time in the household sector; a decline in lending quality, as often towards the end of the boom; and a lag in regulatory supervision, where derivatives and other instruments were increasing very fast and the regulators themselves were not well-equipped or incentivized to oversee and stop excesses. "While we've seen these phenomena before," Claessens said, "we didn't act on them."

Nonetheless, Claessens said there were some new factors that led to this particular crisis that explain, albeit not justify, the lack of concrete actions on the part of markets and policy makers. "The financial instruments involved were probably more opaque this time around, making it hard to value and evaluate them," he noted.

Bruce Carruthers, Harold James, Stijn Claessens and Ann Harrison

"The level of financial interconnectedness – both domestic and global – was high as well, with many new players coming in (such as smaller European countries) that were not necessarily well equipped to deal with such integration."

Barry Eichengreen, professor of economics and political science at University of California, Berkeley, agreed, saying that the crisis went global because of "the extent of real and financial integration; in an integrated world economy it's not surprising that problems in one major constituent part – the U.S. – would have international ramifications."

Another key aspect of the crisis had to do with the concentration of leverage. "Since the indebtedness was concentrated in the household sector this time in many countries, it was both difficult to detect and hard to manage," said Claessens. Indeed, the household sector's degree of involvement in this crisis was unique, which greatly complicated restructuring, he noted.

Some people believe global account imbalances were a causal factor, noted Ann Harrison, professor at University of California, Berkeley, and director of development policy in the Development Research Group at the World Bank, "particularly the rise of demand for assets and supply of lots of liquidity to emerging markets and other markets and they think of the U.S. and other countries as responding by providing more supplies of 'perceived safe assets' – except they weren't so safe. These global imbalances are continuing. Every single G-20 leader in March 2011 asked, how can we address these imbalances? How can we put monitoring systems in place?"

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>
> *– Barry Eichengreen*

Global imbalances certainly played a role, said Harold James, professor of international affairs and history at Princeton University. "There were large surpluses accumulating in a number of emerging markets in Asia and in other countries. While it's popular to think of it as simply a 'Chinese' problem, it's not – it's much larger than that. The deficits built up were not just a U.S. problem – similar things happened in the U.K., Ireland, Spain, etc. One way of thinking about it is the difficulty of sustaining these imbalances."

Claessens did not agree that the imbalances were a root cause. "U.S. traded safe assets but so did other countries in the past. The scale of its doing so was larger but it wasn't any different than what was happening before. And some countries that actually had current account surpluses also had a financial crisis. So it was an element of the crisis but wasn't necessarily the imbalances themselves that caused the crisis. The U.S. was like an emerging market, channeling resources from abroad inefficiently," he said.

Like Claessens, Gian Maria Milesi-Ferretti, assistant director in the research department at the International Monetary Fund, downplayed the idea of global imbalances as a root cause of the crisis. He pointed to several key factors instead: "Spectacular growth in cross-border holdings of financial assets in the advanced economies, along with an increase in complexity of financial instruments and in how exposures went from country a to b; widening of current account imbalances across the globe and a series of financial excesses; and big changes in emerging markets [some positive] but also in their exposure – with more reliance on equity capital flows and less on debt."

How did the crisis spread so quickly? Claessens noted that the channels and speed were surprising but not particularly unusual. "There was direct exposure to the U.S. – for instance, the German banks took a hit, while others had a wake-up call, similar to Asia and other markets. Spillover occurred through the asset market, with liquidity shortages and fire sales triggering second-round effects. Solvency concerns spread – when one institution fell, others were seen as likely to do the same. And there were perverse feedback loops between the real and financial sectors. As the credit crunch hit the real sector, it affected the financial sector in the form of worse asset quality."

James offered a similar perspective, and discredited the oft-cited notion that the crisis occurred mainly due to the housing collapse. "While laypeople tend to call it a subprime crisis, the subprime issue probably was not enough by itself to trigger it,"

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> *– Harold James*

he said. James outlined various themes that he felt were contributing factors: "the character and change in development of financial institutions, the growth of financialization, the growth of complexity, and the poor incentives within that system, including the remuneration of bankers." Inappropriate monetary policy was yet another factor, he said: "By many criteria, monetary policy was too loose in the 2000s. It let off a big surge of credit expansion post 2004."

Eichengreen called upon conference attendees to engage in some introspection, asking what it was about the nature of academe that prevented most

Barry Eichengreen, Suman Bery, and Karl Sauvant

scholars from foreseeing what would happen. "I don't think anyone anticipated how quickly and violently the crisis would go global," he said. "Through much of 2008 up until [the collapse of] Lehman Brothers and to some extent afterwards, people were seeing the crisis as not only American born and bred but concentrated in the U.S., which was clearly wrong. In terms of a number of measures like trade and industrial production, the crisis had already become more severe outside the United States than here. When you look at the crisis globally, it was worse starting in 2007 than the Great Depression starting in 1929."

However, he again brought up the factor of surprise: "The extent and ferocity of the contagion was surprising to virtually everyone. Put yourself back in the summer/fall of 2008. I'd submit everyone here was surprised by its virulence."

Eichengreen also pointed to the collapse of trade as a theme needing further exploration. "Trade collapsed even more dramatically than output, more dramatically than in the Great Depression during the 1930s," he said. "It wasn't protectionism; institutions were stronger this time. Other policies were available to stem the decline in demand – it was not necessary to bottle it up at home to the same extent as in 1929. The trade collapse could have been caused by interruptions in the availability of trade credit, but the evidence is not there. The World Bank and others unilaterally stepped in quickly to provide the credit. It wasn't simply production fragmentation issues – that nowadays components of prominent products cross more borders. That makes for a higher level of trade, so it can't explain the larger percentage decline." Eichengreen said the probable cause was that "in times of high uncertainty, demand for big ticket items [goes] down. People wanted job assurance – that they were still going to be employed next year – before buying expensive items like cars."

Another point to consider was why the banking sector of some countries was affected more than others, said Eichengreen. "Some succumbed to subprime mania, either buying toxic deals from U.S. or engaging in an analogous stuff at home," he noted. "Some banks had serious corporate governance problems in their ownership structure and political environment – Spanish cajas, Germany's Landesbanken, virtually every Irish bank. They were forced to severely contract their balance sheets and saw their losses socialized."

Emilio Ontiveros, chairman of Analistas Financieros Internacionales and a professor at Universidad Autónoma de Madrid, noted that though the financial crisis spread to Europe after it had already struck the U.S. economy, it was likely that its economic and political cost as well as the expense involved in resolving it would be "higher in the Euro zone than in the U.S." European economies are marked by a "low rate of GDP growth, a very high rate of unemployment and also a very high rate of business mortality," Ontiveros noted. As such, "any form of credit rationing has a greater impact on the Euro zone than in economies such as the U.K. or the U.S., and this is especially evident in the case of Spain."

Ontiveros pointed out that in Europe the banking system, "far from being part of the solution to the crisis, has been a major problem. In Germany, for instance, banks are among the biggest holders of Euro zone sovereign debt." However, as the debt crisis has increased in severity, it has taken a political turn and has begun to challenge the economic and political integration of Europe. "We certainly had Bernanke and other officials

Emilio Ontiveros and Bradford DeLong

saying, 'Yes, we have a problem in subprime, but it's a very small portion of the fixed income market; it will be confined to those who are heavily engaged in subprime' – they did not realize how broadly those weak assets had been distributed," said Wharton finance professor Richard Herring. "I think it was quite surprising to see that the first fatality among financial institutions was a small German cooperative rather than a savings & loans in California or another overheated market like Las Vegas, or to see Northern Rock fall before any of the U.S. banks. So I think there's something about not fully understanding the contagion, simply because the instruments had become so complex that even the people selling them didn't fully understand the risks."

Bradford DeLong, a professor of economics at the University of California at Berkeley and a U.S. Treasury Deputy Assistant Secretary during the Clinton administration, said he was surprised by the realization that banks and financial institutions did not fully comprehend their own vulnerability to risk. "Three and a half years ago, if asked, I would have told you that our banks, highly leveraged though they might be, had control over their risks, and were, by and large, properly regulated," he said. "With all the inspections, with the industry's experience at quantitative analysis, with all our knowledge of economic history, with sophisticated bosses who understood the importance of walking the trading floor…I thought our commercial and investment banks were professionals in risk management. But our highly leveraged banks and shadow banks did not have control over their risks. Indeed, if you read the documents from the Securities and Exchange Commission's case against Citigroup for its 2007 earnings call, Citigroup did not know what its sub-prime exposure was, and it seemed to have a difficult time finding out, even after it become a priority of top management."

There are multiple ways of making financial players more aware of the risks they take on themselves—and eventually shift to the overall system. Conference participants emphasized the importance of incentives, disclosure requirements, and other policies that help decision makers overcome cognitive biases and herding behavior.

Political Economy

No matter what theories say could cause or avert a financial crisis, actual public policy is shaped by real-world politics. Regulating complex new financial instruments, leverage or systemic interdependence requires political will to respond with a particular policy or regulation which may not be politically feasible, whereas the politically practical solutions may not be ideal from a purely technical point of view. Politics is shaped by the interests of various incumbent organizations and nations as well as by history and ideology. The political economy of the crisis is thus as or even more complex than the crisis itself.

Jeffry Frieden, professor of government at Harvard University, used the issue of currencies to illustrate the relevance of political economy. "The exchange rate is crucial to the causes and consequences of a crisis, whether it's the exchange rate relationships between surplus and deficit countries, or the role of the U.S. dollar as reserve currency or the Euro zone and its trials and tribulations." Frieden sought to debunk some widely held illusions about exchange rates. Exchange rate fluctuations, he said, are not just "an unpredictable random walk"; regardless of the undesirability of changing policies to affect rates, "governments have little choice but to try" due to the pressures they face from many broad interest groups.

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– Jeffrey Frieden

Frieden also explained that the availability of hedging opportunities does not make political pressure irrelevant; contrary to popular belief, "you can't always insure against massive fluctuations and volatility in foreign exchanges; in many currencies it's hard to hedge."

A third area that comes under political influence is macroeconomic policy coordination, said Frieden. "The traditional argument is that there's no justification for it – that all the externalities are internalized. But from a broader political economy perspective, currency volatility and currency levels can impose costs on others. We know from the past three years' experience that different countries' exchange rate policies can create substantial political difficulties for their trading and financial partners – first through the transmission of crisis effects and second via their impact on non-monetary policies." Stephen Haggard, a professor at the University of California at San Diego, noted that there was a pronounced regional nature to the financial crisis: Europe and the European periphery was hit much harder than East Asia and Latin America, which had experienced financial crises in the past. He argued that efforts to undertake reforms in the wake of those crises made countries less vulnerable to shocks this time around.


Ann Harrison

"Corporate governance was at least a contributing factor to past crises in Asia, as family-controlled groups exploited relations with the government and banking sector and expropriated value from shareholders," he stated. In 2008, however, Asia bounced back quickly. The 1997-98 financial crisis was followed by fairly substantial reforms," he noted. "In Indonesia reforms were arguably most sweeping, because you had a regime change. But even in Korea and the Philippines, what I call 'market-oriented populists' used the crisis to push reforms in business-government relations."

In Latin America, Haggard highlighted the recent evolution towards left-leaning governments but noted that many of these parties had moved towards the center when it came to fiscal policy. "Political leaders in Chile and Brazil believe there were electoral advantages from fiscal responsibility laws, strengthening the central bank, and tackling old bugaboos such as an aversion to foreign direct investment." The result, Haggard added, is that compared to the steep increase in government debt on the European periphery, the debt to GDP ratio in Latin America is only about 40%.

Summing up, Haggard felt that a significant factor in both these non-crisis regions was a dramatic expansion of social policy commitments following the transition to democratic rule that began in the 1980s. "I always like to remind American audiences that Korea and Taiwan—although highly-competitive, export-oriented economies—both have national health insurance." While he did not intend to dismiss adverse trends in Bolivia, Venezuela, Ecuador and Nicaragua, Haggard felt that they proved his point. "Even in those cases, you could argue that the problem was precisely that they had weak democratic institutions, not that they were democratic. Their party systems were fragmented and didn't grant adequate representation to politically-significant groups ."

In this vein, "some have suggested that the pacification of the middle class was an underlying root cause of the crisis," noted Harrison, "and that the enormous increase in inequality which also built up right before the 1929 crisis was such a problem that one response was to placate the middle class through low-cost housing loans." She asked what the panelists thought of this theory championed by Raghuram Rajan of the University of Chicago and Branko Milanovic at the World Bank.

Claessens proposed another perspective, pointing out that economists like Daron Acemoglu argued there was financial engineering going on where the rich were starting to steal from the middle class, "and the mechanism to do that was to offer them houses that they couldn't really pay for, with cheap financing. So there are a lot of things happening here at the same time. There's a link, but I'm not sure there is a causality."

Eichengreen pointed out that political economy and ideology played a role in the crisis – "political economy in the sense that the regulators were captured by the regulated, and the ideology manifesting itself in the extent to which the regulators were consciously starved of resources." He added that "the case for capital controls of one sort or another has gained ground since the crisis," but unfortunately, he noted, the world has not made much progress in addressing inadequate

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governance. Several participants commented that national sovereignty and politics often prevent global governance solutions from taking hold.

Bruce Carruthers, a sociologist at Northwestern University, pressed Eichengreen on the issue of who is at fault – "Do you have some general suspects to round up, particularly when you were talking about the role of ideology – regulators aren't watching what's going on, bad things can happen. Who are the bearers of this ideology? Where did it come from? Was it discredited?"

Eichengreen responded by saying that he had in mind partly the ideology of market fundamentalism – "the belief that self-regulation will get us a long way toward where we want to be – a belief some influential policymakers and influential academics encouraged. But also [I'm thinking of] the mechanisms of what kinds of arguments are easier or more difficult to publish, float in seminar rooms, etc."

Frank Dobbin, professor of sociology at Harvard University, discussed political economy issues through the lens of agency theory as the solution to the conflicts of interest between managers and shareholders. In the 1980s and 1990s, he explained, U.S. firms changed their basic approaches to strategy and compensation, governance, and outside monitoring thanks to "agency theory," an idea pushed by investment fund managers to advocate for shareholder value.
Claiming that managers and owners of firms had an inherent conflict of interest, the theory prescribed certain measures – some designed to make firms more entrepreneurial and risk taking, and others to constrain CEOs' risky behavior. In practice, Dobbin said, firms "took up all the prescriptions that would encourage risk taking but not really the ones designed to check risk through incentives and monitoring."

Agency theory prescribed a reduction in product diversification in order to prevent companies from acquiring for the sake of empire building. A single-industry firm, however, faces greater risk in downturns. Debt financing (making companies borrow to expand), another pillar of the theory, was supposed to "discourage stupid acquisitions that happened when CEOs had cash lying around and wanted to build bigger empires," said Dobbin. But firms with lots of debt can fail.

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> *– Frank Dobbin*

Gian Maria Milesi-Ferretti, Simeon Djankov, Christine Wallich

On the compensation side, agency theory talked up stock options, to reward executives for increasing the firms' value. But in practice firms simply structured the options in such a way as to reward risky short-term gains (with no penalties for losses). With such incentives, "CEOs had every reason to play roulette, taking extreme risks," said Dobbin. Another idea of agency theorists was executive equity – long-term compensation plans to minimize risk-taking by making executives owners of the firm. By and large, said Dobbin, "firms didn't do it."

Agency theory also advocated board independence. Smaller, more independent boards made up of outsiders could constrain risk and even "fire lousy CEOs," said Dobbin. While companies did reduce board sizes, they were still chaired by the CEOs. "When the CEO is chair, the board doesn't fire the CEO," noted Dobbin.

In every case, said Dobbin, companies cherry-picked changes and applied them selectively in the name of agency-theory based reform. Such changes certainly played a role in scandals like Enron and WorldCom, but they also contributed to the subprime crisis, Dobbin explained. "These managerial changes were transferred to investment banks. In 1970 investment banks were partnerships. By 1999 they were all public companies, following the shareholder value model."

If investment bank executives didn't stand to make money on options, said Dobbin, these companies wouldn't have invested billions of dollars of borrowed money in risky financial instruments. "The question now is what happens in the rest of the world? If these [shareholder-value] prescriptions appear elsewhere, in bastardized form, it would create the same set of perverse incentives."

Simeon Djankov, deputy prime minister of Bulgaria, offered a European perspective on the effects of politics on economic policy. When the crisis started, Djankov explained, "there was much happiness in Europe, saying this is all America's mistake, this is the end of American capitalism." It took quite a while for Europe to acknowledge that the problem wasn't just in the U.S., he said. Even when this happened, people were unwilling to break their routines: "The first response was, OK, we have to do something – but it's summer, so first we go on vacation."

When everyone returned from vacation, another issue came up – an election in one of the biggest EU countries. Djankov said that because of such political cycles, the EU lost about a year and a half in which something could have been done, simply because of unwillingness to act in the midst of them. As Europe worked through Greece's crisis, then Ireland's, then Portugal's, they were caught time and again in electoral and policy cycles and were forced to delay actions, he said.

According to Ontiveros, "clear asymmetry" between monetary union and the lack of coordination of

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– Simeon Djankov

fiscal policy among European countries "is probably the most important reason to explain the gravity of the sovereign debt crisis in Europe," Ontiveros noted. In his view, the most important priority is to "reduce the risk premium in the debt market." While this is undoubtedly a difficult task, "the removal of the threats to public debt markets in the Euro area is one of the necessary conditions to finally overcome the global crisis," he concluded.

Such policy responses are, however, inherently difficult. DeLong drew from the American experience and noted that "no regulator wanted to get in the way of lenders willing to borrow, creditors willing to lend and banks willing to issue. If you did, Congress would have demanded Greenspan's head with bipartisan consensus. It was perceived to be better to wait and clean up the mess later."

Institutional Analysis

Beyond economics and politics, one must also incorporate institutions into the analysis of global markets. They are also important to the analysis of the causes and the effects of crises. In fact, the global economic and financial crisis can be conceptualized as an instance of massive institutional failure. Institutions include formal rules and informal norms, cultural understandings, and other types of structures that enable the interaction of sellers and buyers in the market, placing limits on what they can and cannot do, and providing a framework for policy intervention. Markets cannot work without a broader institutional skeleton that is itself dynamic and subject to influence by the various actors involved, especially governments, international agencies, and large businesses.

Glenn Morgan, professor of international management at Cardiff Business School, Cardiff University in the U.K., chose the case of the over-the-counter (OTC) derivatives market as an illustration of the importance of institutions. His reason for adopting that approach, he noted, was that "this reveals to us a lot about the complexity of the relationships between private actors and public actors. And also, it reveals some of the complexity about the relationships between national regulation and international regulation."

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Morgan pointed out that from a standing start in the early 1980s, OTC derivatives had evolved into a $595 trillion market by 2007, according to the Bank for International Settlements. "We see a market that's established incredibly rapidly, and also becomes, as Bernanke pointed out, central to the financial structure in the 2000s into the sub-prime crisis." The nature of OTC contracts is that they are bilateral, which makes them opaque – and that makes it difficult for outsiders to assess their risk. After the Commodities Futures Modernization Act of 2000 was passed, OTC contracts became legally enforceable – but the law also made it clear that the market was to remain unregulated. "This enabled this market to expand hugely to take on all sorts of risks. Because it was all bilateral, there were no clear rules about collateral, margins, et cetera. And so we have the case of AIG signing massive amounts of OTC credit default swaps without putting anything aside to cover the cost of such contracts." Morgan thus emphasized the abdication of regulatory responsibility in crucial areas such as the derivatives market as a chief cause of the crisis. Transparency was also lacking due to the lack of accounting standardization and a true market-based clearing mechanism.

As efforts have been made to create central clearing houses in order to manage these risks, Morgan notes that "what we're seeing is…a sort of struggle between private actors and public actors.

Bruce Carruthers

Here, obviously, it's the U.S. that was crucial to what's going on. Dodd- Frank, and how those rules are implemented, is going to be central to the degree to which there remains a significant OTC element with the sort of risks that are retained in an OTC environment, as opposed to things coming onto clearing houses. I think that in terms of the international context, the U.S. is leading in terms of legislation." Will regulation lead to a reduction of risk? Morgan is not certain – since the regulations themselves are so new. Compared with what regulators in the G20 countries may have expected in the aftermath of the crisis, certainly no major reduction in risk has occurred, Morgan said.

Also emphasizing the institutional underpinnings of the economy, Northwestern University professor Bruce Carruthers offered a nuanced analysis of how the crisis "posed a challenging combination of uncertainty, complexity and interdependence." He noted Chicago school economist Frank Knight's conditions for decision making:

- Under certainty, the decision maker knows what will happen and can choose the best alternative.
- Under risk, the decision maker doesn't know what will happen, but knows the probabilities under which outcomes occur.
- Under uncertainty, decision makers don't know what will happen and also don't know what the probabilities are.

While certainty and risk are relatively easy to deal with, true uncertainty poses a problem. Too often, said Carruthers, people deal with uncertainty "by pretending it is risk."

To do so, of course, market participants make assumptions. Those assumptions – often implicit and unstated – about what is likely or unlikely to happen are often made, noted Carruthers, based on the assumptions of their peers. The danger, obviously, is that if everyone makes the same assumptions, any "violation [of them] blindsides everyone."

Psychology, Social Processes, and Individual Responses

Human frailties, cognitive assumptions, leadership, and suffering were as important to the unfolding of the crisis as the large-scale rules, norms and policy interventions discussed thus far. Too often, accounts of the crisis completely neglect the human element. "What's missing," noted Eichengreen, "is [acknowledgment of the] pain and suffering at the individual and household level."

> The crisis "posed a challenging combination of uncertainty, complexity and interdependence."
>
> *– Bradford DeLong*

Individuals' capacity to process information over time also plays a key role in how they respond to a crisis. Jack Goldstone, professor of public policy at George Mason University, noted that low-probability or low-frequency events are more difficult to plan for. "Major financial crises are seen about once every 30 years or so," said Goldstone. "It's those kinds of events that give us the most trouble when it comes to risk. Japan was not prepared for a tsunami to cause partial meltdowns in half a dozen nuclear reactors, but [the reactors] were actually built on the site of an 1896 tsunami that reached 125 feet. The 2011 tsunami reached 124.8 feet – nothing that hadn't been seen before. But the fact that it happened 100 years ago meant essentially it was discounted as a possibility."

Michael Useem, a professor of management at Wharton and director of the school's Center for Leadership and Change Management, noted the need to learn from past experience on managing risk. People who deal with risk at the enterprise level – whether at a corporation, in government agency or in a regulatory institution – tend to think about how to minimize risk before a crisis occurs, and they also examine responses to crises after they have happened to see what measures are in place to avert potential catastrophes. A useful analogy can be drawn to the armed services all over the world, which conduct what are called After Action Reviews. Useem said companies such as Exxon Mobil have been through "a wringer, which has forced them to rethink what measures they have in place to deal with risk. We have to look to the future by first looking to the past."

Social norms and shared cultural understandings that played a role in the crisis, argued Carruthers, triggered social processes that caused these outcomes. "One hallmark of the crisis concerned how many people were surprised by events," he noted. "Who knew AIG had become so central to credit default swaps? Who knew that the fall of Lehman Brothers would become so consequential? Who knew that so much AAA-rated structured debt was so overrated? Even among those who did know better, many felt compelled to act as if they didn't." The geographical concentration of many of the players – Wall Street, the City in London, Greenwich, Conn., Tokyo – exacerbated the situation, said Carruthers. "Physical proximity means that financial elites move in overlapping social circles," he said. Carruthers pointed to three social-process features that influenced how people acted in these "small worlds": homophily, peer-based benchmarking, and status.

Frank Dobbin, Jeffry Frieden, Jack Goldstone, Karl Sauvant and Ed Mansfield

Homophily, said Carruthers, occurs when people seek out and surround themselves with others who are like them. While natural, people "risk becoming isolated in a social and intellectual echo chamber, where those around us confirm our expectations and share our assumptions," Carruthers explained. "This can make it difficult to obtain truly new information and ask truly challenging questions."

Homophily is reinforced by peer-based benchmarking and imitative search: "If our peers are doing something, we are likely to start doing it, too. When deciding what to do, we look at what the competition is doing. 'Best practices,' often promoted by consultants, serve as another homogenizing factor. This and other types of informational cascades can beget herding behavior," said Carruthers.

Status is a third factor that reinforces this behavior. Since "it's hard for low-status people to challenge high-status people – they risk being fired or ridiculed," it can accentuate the echo chamber effect, noted Carruthers. "Through the 1990s and 2000s, the U.S. financial sector enjoyed rising wages and the ability to import the cream of U.S. higher education. So even if the emperor knows he has no clothes, it's hard to do anything about it when all the other emperors are nude as well."

Princeton history professor James had a slightly different take on Carruthers' idea: "Bruce's story – that we're coming together in global villages and people are imitating each other – is in a sense wrong because people can't communicate adequately and don't know what other people are doing. A famous example of this is Citigroup – it had more than 60 different computer operating systems that couldn't talk to each other, so nobody was in a position to really put it all together and to see where precisely risk lay. So it's a global village, but one that is talking at odds, not talking coherently."

Either way, an aggravating phenomenon, said Carruthers, is the tendency of people to use "categories, cognitive devices and schemata" to simplify complex data: "Lots of uncertainties get absorbed." An example of this related to the crisis, he said, is the credit rating: "Decision makers focus only on the overall rating precisely so they can ignore all the underlying information."

Such summary information is so accepted that ratings downgrades can have huge implications. "En masse, pension funds and insurance companies have to unload assets that have fallen below investment grade," said Carruthers. "And those schemata are a bunch of largely unexamined assumptions about the way the world works, about what's relevant and what is irrelevant. And it can synchronize activity in unexpected and unhelpful ways."

When everyone uses the same assumptions and risk models, it accentuates herding behavior. With high levels of interdependence, a strategy that might work well for one person may become detrimental if everyone uses it, "much like rushing for the exits in a crowded movie theater," explained Carruthers.

"Interdependence," Carruthers added, "is rooted in networks." How networks are structured affects the way information and innovations are spread. "Typically, organizations are embedded in multiple networks at once. Because of their implications for overall stability, regulators have become interested in the macro structure of networks."

While "the rules of the economic game – laws, regulations and other systems – can enhance predictability, during a crisis, the rules can be suspended suddenly and in unexpected ways," said Carruthers. "This is particularly true in capitalist democracies where the polity and economy closely interact and where the state of the economy is a political issue."

Carruthers explained that this is where the issue of "too big or too connected to fail" comes in – generally, market economies are supposed to self-correct, but often it is politically impossible for governments to sit by when institutions collapse and take down large swaths of households with them. ■

Lessons Learned

Policy Interventions

Were there any areas in which governments or other institutions did things right during or after the crisis? Several experts said yes. "People compare the great recession with the Depression. One reason we didn't have a depression was that people learned lessons from the Great Depression," said Princeton's James. "One, learned in some countries more than others, was the Keynesian lesson on the need for fiscal stimulus. Big countries did this particularly well. We also learned monetary policy lessons – it's clear the Fed has deeply absorbed this."

"The third lesson was more problematic," noted James. "During the Great Depression the U.S. didn't have megabanks that were too big to fail. But the Europeans did: Their crisis was triggered in May 1931 by the failure of Austria's Creditanstalt. It was clearly too big to fail. Suddenly a fiscal position that was good before became terrible and caused a currency crisis. These too-big-to-fail bank failures take years to resolve; they can't be done with simple policy measures. And indeed the legacy of those interventions lasted multiple decades. It's much harder to do microeconomic adjustments."

"People compare the great recession with the Depression. One reason we didn't have a depression was that people learned lessons from the Great Depression."

– Harold James

In many ways, agreed experts, things could have been worse. "While household and government and some financial institutions' balance sheets are still shaky, if you look at the high-grade corporate sector in the U.S., Europe, Japan – it's in pretty good shape – lean and mean," said Nouriel Roubini, co-founder and chairman of the economic/geostrategic consultancy Roubini Global Economics and professor of economics at New York University's Stern School of Business. "They cut labor costs brutally. It meant massive job losses, but now they are running efficiently and profits are looking up. If they get more confidence and start spending more, it could lead to recovery."

"The dog that didn't bark in the response to the crisis, differentiating the great recession from the Depression, mainly would be the relative absence of significant trade protectionism," said Ruggie. "Tariff barriers didn't shoot up; U.S. anti-dumping cases didn't skyrocket. There was a lot of noise about 'Buy American' but there was a surprising absence of protectionist response to the crisis."

"It's indeed one of the things that causes people to be optimistic," conceded James, "that we haven't had a major reversal into protectionism. But economic historians are always rather Cassandra-like on this issue. The really bad bit of protectionism during the Depression wasn't at the beginning; it was really a response to the credit crunch in 1931 and 1932, when countries that were faced with tremendous monetary deflation had to do something to stop it and the most obvious thing to do was to take trade measures. If you look at the public stimulus packages in Europe today, often there are concerns that they shouldn't be used to prop up foreign producers." Moreover, Harrison noted that currency manipulation became the leading form of protectionism during the crisis.

"We have seen some protectionism on the financial side, more than on the trade side," said Claessens. "[We see it in] the structuring of recapitalization programs, some localization of capital flows – hopefully these will be temporary."

Glenn Morgan, Phillip Swagel and Emilio Ontiveros

Phillip Swagel, now at the University of Maryland's School of Public Policy, was assistant secretary for economic policy at the Treasury Department between 2006 and 2009, and hence squarely in the eye of the storm during the financial crisis. He provided an insider's account of his view of the crisis. As the Treasury Department was forced to respond to a burgeoning crisis that included the failure of Fannie Mae and Freddie Mac, the impending collapse of Lehman Brothers and Merrill Lynch as well as default risks at AIG, officials realized that they lacked the legal authority to do so. Legal constraints were accompanied by political constraints, Swagel said.

With so-called 20-20 hindsight, most of Swagel's comments focused on lessons learned as a result of the crisis. "Fiscal policy is a tool," he said, adding that "some types of fiscal tools work better than others. That government spending is really not very effective on a large scale, is, I think, one of the lessons we've learned from rapid stimulus. It's really hard to spend money quickly and with effective quality." He described the latter course as "the epitome of burning taxpayer resources."

Speaking about the Troubled Assets Relief Program (TARP), under which the Federal government acquired assets and equity from troubled financial institutions, Swagel noted that one of the key lessons learned was that "there are limits to monetary policy." In addition, he said, when a crisis exists as a result of inadequate capital, monetary policy tends to regard it as a liquidity problem.

In some instances, such as AIG, that is indeed the case – the problem is lack of liquidity. In other cases, though, the problem is solvency, not liquidity. "In some sense, in not lending to Lehman Brothers, the Fed faced the same sort of decision as the European Central Bank did in lending to the troubled banks of Ireland and Greece."

> "That government spending is really not very effective on a large scale, is, I think, one of the lessons we've learned from rapid stimulus. It's really hard to spend money quickly and with effective quality."
>
> *– Phillip Swagel*

DeLong noted that his confidence in the ability of central banks and governments to intervene successfully in financial crises was misplaced. "I thought the Federal Reserve had the power and will to stabilize the path of nominal GDP," he said. Economists have long believed that when "demand for currently produced goods and services is crashing, because households and businesses find themselves short of the safe, liquid vehicles of appropriate duration in which they want to park their wealth, it's the business of the government [and] the Central Bank, to fix the situation and give the private sector the financial assets it wants." The ability of governments and central banks to stabilize financial markets had been tested in several crises, he added, for more than two decades. These included Black Monday in 1987; the Savings and Loan crisis of the early 1990s; the Mexican peso crisis; the East Asian crisis; the Russian state bankruptcy; the collapse of Long Term Capital Management; the dot-com and tech bubble crash of early 2000, and many others.


Bradford DeLong

"In all of these, the Federal Reserve, without breaking a sweat, intervened strategically in financial markets to successfully build firewalls between the effects of financial panic, if any, and effective demand for goods, services, and labor, on the other," DeLong pointed out. As a result, economists "began writing papers on the great moderation," trusting in the ability of governments and central banks to keep financial markets stable.

Unfortunately, experience now shows that the government's ability to intervene in financial markets "works only as far as the government's status as an issuer of safe and liquid assets persists," DeLong explained. "If confidence in the government cracks, then, all of a sudden, the monetary and banking with fiscal policy options go way, way down…So my belief that the Federal Reserve and the government had the power and the will to stabilize the growth path of nominal GDP was also wrong. I don't think I was wrong because the government does not possess the technocratic power. I was wrong because the government does not possess the political will and the technocratic clarity of thought to understand what strategic interventions in financial markets are appropriate in the aftermath of a financial crisis."

Finally, DeLong said he thought that "economists had an effective consensus on macro-economic policy that the task of the government was to stabilize nominal demand and to keep nominal demand growing at an appropriate rate, and to do whatever was necessary in order to keep the flow of nominal demand more or less stable." That belief, too, turned out to be erroneous, he said.

Suman Bery, a member of Indian Prime Minister Manmohan Singh's Economic Advisory Council, focused on the lessons India learned about managing global risk during the financial crisis. "We learned that counter-cyclical policy is possible, and this was new for India," he noted. "It has become a much more integrated and open economy in the last decade. We were new at the game, but because we had experienced leadership, and the prime minister himself is an economist, during the financial crisis they got it right. I was one of the critics of the buildup of reserves. But the reserves were very important for calming the domestic, as well as the international financial markets. Even though we're not as well managed fiscally as many of our peers, we took the gamble of actually letting reserve stock go down, and we weren't penalized by the markets. That was a huge learning."

Is the hierarchy of global risk different for a poor country like India? According to Bery, among all the major emerging markets, India is furthest behind in the transition of labor from the countryside to the cities. "Global integration has been very important for its growth spurt in the last decade," he noted. "India is coming to the party very late, when the rules of the game are in serious danger of being reshaped. The old upholders of global political open trade, essentially the United States and to some extent Europe, seem to be reconsidering their commitment to trade openness. And yet it's going to be very difficult for India to achieve its structural transformation without an open global trading system."


Mauro F. Guillén and Alejandro Werner

Alejandro Werner, a professor at Madrid's IE Business School and Mexico's deputy treasury secretary during much of the crisis, offered suggestions that governments could pursue as an economic crisis unfolds. It was critical, he noted, that governments should recognize that the goal of "sovereign risk management policy is to reduce risk." Governments also need to recognize the importance of good macro-economic policy, including a strengthening of the government's fiscal position, prudent regulation of new financial products, and anticipation of major shocks from abroad, especially those having to do with drastic changes in prices, including commodities and energy.

A Failure of Global Governance

John G. Ruggie, a professor at Harvard Kennedy School of Government and affiliated professor in International Legal Studies at Harvard Law School, noted that while globalization has transformed the world profoundly, the global governance system has not kept up with the pace of change. "The global regulatory system, to the extent that we can say that one exists, has fallen well short in providing a social pillar for economic globalization," he pointed out. "To make matters worse, the pressure from economic globalization has undermined domestic social pillars, as we see in the disintegration of labor unions in the United States. So the governance gap, the misalignment, is made worse over time, rather than better." At the same time, developing countries often do not have the regulatory standards to protect their workers or the environment. "They compete against one another to attract foreign investment and therefore often lower standards," he added. The result is that such misalignment endangers individuals as well as the communities in which corporations operate.

"What are some of the worst cases?" he asked. "Well, here's a short list of actual cases: Forced relocation of communities to make way for a mining project; security forces, hired to protect oil company pipelines, raping and killing villagers; a company providing transportation and logistical support to government forces that are then used in the commission of genocidal attacks on opposition tribal territories; entire apparel factories burning to the ground with hundreds of workers inside because the doors are locked to prevent them from sneaking out for breaks."

> "The global regulatory system, to the extent that we can say that one exists, has fallen well short in providing a social pillar for economic globalization."
>
> *– John Ruggie*

Ruggie has worked for years with business, government, communities and NGOs to develop a blueprint for a soft law instrument that would help protect human rights, workers rights, and community rights, and also win the support of corporations and governments. The lack of such legislation has proved expensive, he noted.

A Goldman Sachs study on 190 projects started by international oil companies indicated that the time it took for new projects to come on-stream had doubled during the past decade, causing significant cost inflation. The study showed that the cost escalation was caused by "technical and political complexity." Ruggie approached one of the oil companies and tried to delve more deeply into the causes. "What we found is that non-technical risks account for nearly half of all the risk factors this oil company faced. What they called stakeholder related risk, that is, pushback from communities, was the single largest category of risk."

Nicole Woolsey Biggart, Ethan Kapstein and John Ruggie

Ruggie asked the company to come up with an actual figure for the so-called value erosion. "So they went back over a two-year period, and they discovered that they had lost $6.5 billion. They called it "value erosion," from stakeholder-related risk, which they had not known about. Why did they not know about it? The reason was that the numbers were never aggregated to a level where senior management could see them. They remained with the local operating units, and they were absorbed into operating costs."

Ruggie recommended that companies widen the due diligence they conduct before setting up their business, by asking questions such as: "You're going to build a mine here. How many people is that going to attract? Is there housing? Is there water? Are there roads? Is there electricity? And if not, where is all this going to come from? What kind of pressure is that going to put on you, on the local government? Is the local government capable of dealing with it? If not, you're going to end up being at the receiving end of the demands. What can be done ahead of time?" The same kind of due diligence should be carried out periodically throughout the life cycle of a project.

In a similar vein, Ethan Kapstein, a professor of political economy at INSEAD and visiting fellow at the Center for Global Development, noted that corporate social responsibility (CSR) projects generally consume, at most, some 1% of turnover at multinational firms. He proposed an alternate risk mitigation strategy to CSR projects – involving the use of local supply chains – to deal with social concerns. "Leveraging your local supply chain, leveraging your sourcing, requires managers to think strategically about how they relate to the societies in which they operate," Kapstein said. "It requires them to go beyond a simple cost calculation. The appeal, of course, of global sourcing, is that your supply chain manager, your current manager, can go to the internet and source things at the lowest cost, without taking into account the externalities associated with that decision. Local sourcing requires that you think about those costs more strategically, and you think about what those externalities are."

In support of this argument, Kapstein proposed the following hypothesis: "The greater the impact of a firm's sourcing decisions on local economies, the more constituents the firm will develop in support of its strategic goals."

Kapstein offered the example of a multinational firm in Africa, which decided to stop using a local firm that was training its workers and outsourced the task to a global consulting firm based in London. What the multinational did not understand was that the local firm was not just educating the workers to do their jobs well. "That local firm didn't just deliver training. It also delivered a lot of political support for that company. It had great contacts with the capital. It knew the players."

Such decisions tend to escalate tensions between headquarters and people working on the ground, Kapstein said.

Kapstein contrasted this approach with the one adopted by a U.S. company involved in gold mining in Ghana. While he had expected the company to just go into the area, excavate the gold, and leave the region worse off than before, he was surprised to learn the mining firm had built positive linkages with the local community. “In fact, what we found is that the linkages the firm had created with the local economy were incredibly profound through a strategic sourcing decision. Even though the mine itself only employs 1,800 people, it supports 50,000 people throughout the Ghanaian economy, so a huge multiplier effect was created through the strategic sourcing decisions the firm made.”

That is how deploying local supply chains can transcend the impact of local CSR programs, Kapstein argued. “It’s nice to build a school or a hospital or to support a soccer team. But through strategic sourcing decisions and the use of local suppliers, you may be able to support 50,000 people. That’s a huge political constituency on your behalf.”

Another case in point: Heineken, the Amsterdam-based beer brewer, which operates 140 breweries in more than 70 countries. According to Kapstein, “Heineken goes to great pains to become a ‘local company’ in the countries where it does business. In Africa, for example, it tends to source local sorghum rather than import barley. It focuses on local impact, on local employment, local training. That is a way to build brand loyalty, but it’s also a way strategically to fight off increases in excise taxes. Why? Because if a multinational firm goes to the Ministry of Finance and says, ‘We want lower excise taxes,’ they’ll be thrown out of the room. But if 50,000 farmers come in and say, ‘If you raise excise taxes, you hurt our incomes,’ then the government is at least going to listen. Again, it’s how you make strategic use of your political constituency.” Not all companies had this kind of far-reaching attitude, Kapstein said, adding that many senior managers had no idea of who their suppliers were.

Nicole Biggart, a professor at the University of California-Davis Graduate School of Management, noted many companies are becoming aware of their carbon footprint and starting to push their supply chains to reduce the environmental impact of sourcing. “There’s a sustainability consortium with 70 firms that are trying to measure every step in supply chains,” she said. “It was instigated by Wal-Mart, but Best Buy, Carrefour, Marks and Spencer and a lot of big manufacturers and retailers recognize that it’s going to be important to measure carbon because having a large carbon impact is very risky.”

Noting that the conference was about systemic risk, Biggart pointed out, “There is nothing more systemic than our environment. Water, air, you name it – if it is environmental property, we all share it…You can’t separate my water from your water. If the ocean gets acidic, it disrupts food supplies for ocean-living creatures and it impacts all of us. So the environment is the true systemic concern. We have very new property rights issues but we don’t have ways of thinking or talking about them because our notion of property rights is rooted in very different understanding. We share systemic risk, but we do not govern ourselves systemically.”

Solutions to environmental issues are being found – but so far these are often at the level of city administrations or regional governments, rather than at the national or global level, according to Biggart. “San Francisco has zero emission buses because it’s cheaper over the long run. In London, 33 boroughs have planted two million trees. Paris has just launched a 300 car electric car share with 50 regional cities. At that level, things get done. New governance forums are being developed. Many of us are very much concerned with nation states, but nation states are not where it’s happening.” ■

Still Many Risks Ahead – Lessons Not Yet Learned

Because of Ineffective Remedies, Systemic Risks Endure

There is a growing consensus among experts that the underlying conditions that produced the crisis have not been neutralized. We managed to respond to the immediate threats of the financial meltdown and to avoid the most devastating scenarios, but the longer-term drivers of global instability remain active. In fact, the crisis has accelerated long-standing trends that could bring about volatility and confusion, including: the rise of the emerging economies, some of which are overheating and could suffer from the bursting of their own bubbles, "sooner than we think," according to Yasheng Huang, a professor at the MIT Sloan School of Management; the changing age composition of the population; a potential rise in nationalism and/or protectionism; the limited ability of highly-indebted governments in the rich countries to cope with further economic problems; and the enhanced competition for scarce natural resources and energy. "We can conclude that many of the underlying causes of the crisis have actually not been addressed – which is potentially ominous," said Ann Harrison.

Government interventions, said Claessens, were largely what had been seen before in past crises – "liquidity support, bank recapitalizations – with the same mistakes as before. As we take stock today we have to admit we didn't go as far as we wanted to with regard to reform and restructuring."

"The initial vector of contagion," noted Herring, "was that after Paribas refused to pay out, the banks lost confidence in each other. Trade finance depends heavily on that trust. We wasted a whole year trying to interpret that as a liquidity crisis, and it was evident to the banks themselves that it was a solvency crisis. All the central banks were just pouring liquidity into the markets instead of dealing with the solvency issue."

"Entire countries can have destructive discount rates," said Goldstone, "if they become focused on short-term rather than long-term futures. One reason the East Asian Tigers had done well developmentally is that they were lucky to have leaders who put a higher value on their countries as a whole moving up in the global league tables than on their personal power and position. How we do this for a whole country may be a matter of leadership or may be a matter of events changing the discount rate. We keep making the same mistakes because we don't seem to have a lever saying, 'Here's something that may happen in 30 years.' We have a 'What has posterity ever done for me' attitude."

> "We keep making the same mistakes because we don't seem to have a lever saying, 'Here's something that may happen in 30 years.' We have a 'What has posterity ever done for me' attitude."
>
> *–Jack Goldstone*

"It would be interesting to see whether there's a categorical difference between democracies and non-democracies," said Carruthers, "particularly within the democracies, as populations age – older people make more claims on resources but also have more political weight, which means that

> There still don't exist "robust enough institutions that can limit bubbles as they start to get more risky. We don't have well enough developed regulatory governance, controls on revolving doors, accountability, and adequate supervision."
>
> *–Stijn Claessens*

political solutions to this problem will get tougher in democracies – maybe not so much in different political systems.

Claessens noted that there still don't exist "robust enough institutions that can limit bubbles as they start to get more risky. We don't have well enough developed regulatory governance, controls on revolving doors, accountability, and adequate supervision."

James agreed that the causes still existed. "While the housing market isn't as big of a problem, poor people are still taking on too much debt. This time it's through other kinds of debt, like credit cards – compensating for decreased incomes."

Instead of giving credit rating agencies more bite, James said that they should be eliminated. "Getting rid of ratings agencies would be an important step forward." Because they are essentially in bed with issuers, "this is why they get into the position of being so uniquely important to market outcomes," he noted.

"People are trying to wrestle with the question of wrong incentives in banks and institutions that are too large, but it can't be done quickly. It may well be that the geography of the next financial crisis is slightly different, which wouldn't be surprising. They don't exactly strike in same place," James added.

"As far as global imbalances, we got a slight contraction of the imbalance in the great recession but not a complete unwinding," James noted. "That's good, because if you keep unwinding it you get a reversal of the global flows – that's indeed the kind of thing that pushes a Great Depression rather than a recession. They're increasing again though, and we're also in an era in which cheap money is fueling new commodity booms and asset booms. So the problem is we're still living in a world that produces these crises."

"The problems of the financial system on Wall Street have not been resolved," added Roubini. "People talk about Dodd-Frank [the Wall Street Reform and Consumer Protection Act in the U.S., signed into law in 2010], but have we really changed the system of compensation? Have we dealt with the corporate governance problem? Have we divided commercial banking and the more risky shadow banking and investment banking? No. So that remains."

The U.S., said Roubini, risks having an anemic recovery. "If and when the public sector deleverages, raising taxes, reducing transfer payments, cutting spending – it will force another round of deleveraging of the household sector. Also, the labor market is improving but unemployment is still very high." Most conference participants agreed that the incipient recovery could be threatened by a return to "business as usual" on Wall Street, with little change in executive compensation, perhaps a greater concentration of risk and a worsening of the "too-big-to-fail" problem, and the lingering issue of shadow banking practices.

Foreign Investors and International Financial Institutions

Karl P. Sauvant, executive director of the Vale Columbia Center on Sustainable International Investment at Columbia University, brought up the issue of risks related to foreign direct investment (when a company headquartered in one country makes an investment giving it some control over a company in another country).

As firms link up in this manner, Sauvant explained, they create international supply chains. But what happens when one link in the chain is unable to produce? "The supply chain disruption risk is amplified as companies move to just-in-time production. Think of the earthquake/tsunami in Japan or the ash cloud emanating from Iceland; but it is unrealistic to ask companies to have backup for all parts and components in their own countries, so it's a risk we have to accept—unless firms themselves want to protect themselves against supply-chain risk disruption."


Christine Wallich

"I think we can all agree that just-in-time manufacturing offers lower costs," noted Mauro Guillén, Director of the Lauder Institute, "but then it comes at the expense of flexibility. The opposite system – just-in-case – has the opposite benefits and costs. Most companies have reduced their working capital and inventories. To the extent that companies hold less inventory, recessions are shallower because companies need to start restocking right after the first sign of an impending recovery. Some of the recent recessions could have been deeper if it hadn't been for just-in-time."

Another issue is governance. "A multinational enterprise has affiliates in many countries, but there is no framework for governance," said Sauvant. "There are 3,000 international investment agreements, most of them bilateral treaties. Is this fragmented regime enough, or is there a risk of a governance gap?" Sauvant explained that taxation, human rights and other issues could fall between the regulatory cracks given the scattershot nature of the agreements. "One could argue that the current regime is strong because it's enforced by the legal counsels of 80,000-plus multinationals. But there is a legitimacy risk," he noted.

In addition, Sauvant said, the current system is, by design, made to protect foreign investors. "It pays little attention to the interest of host countries and their legitimate public policy objectives. There is also a risk of overshooting when rebalancing the current regime: countries are now including essential security interest clauses in international investment agreements that are self-judging" and whose application can nullify treaty protections.

Sauvant also noted that there is a risk of FDI protectionism: " National FDI laws and regulations are becoming less welcoming, and there is a resurgence of screening mechanisms, indicating that the cost-benefit analysis regarding FDI has changed. If FDI protectionism increases and reduces flows of such investment, it may also affect trade as one-third of world trade consists of intra-firm trade."

So who ended up paying for the crisis, and is that model sustainable? Christine Wallich, director of the Independent Evaluation Group for MIGA (Multilateral Investment Guarantee Agency) of the World Bank Group, explained the role of the international financial institutions (IFIs) in the crisis and why they might be unable to help in a subsequent case.

Just like everyone else, said Wallich, the IFIs were also caught by surprise. A study by the World Bank's Independent Evaluation Group found groupthink and other sociological dynamics within the organization that prevented voices of warning from being heard.

However, once the need became clear, the IFIs did act, lending a substantial amount of money to the struggling countries, noted Wallich. What helped was the World Bank's available capital: "The global economy had been doing well, so there had been relatively low growth in the demand for loans from the World Bank in the pre-crisis years. As a result the Bank had a lot of capital headroom – which was a blessing in 2008 because the Bank was able to rapidly increase its lending which almost tripled in one year."

It was a blessing then, but a potential risk for the future, said Wallich. "By using up so much of its headroom for crisis support, the amounts that can be lent in the future is less. In the next years, absent a capital increase , the World Bank's annual lending may be about two-thirds of what it was before the crisis. Interesting, following the last selective increase in the Bank's capital, China became the number 3 shareholder in the World Bank, after the U.S. and Japan – the first emerging market country to become one of the Bank's major shareholders."

While the World Bank's money arguably went to the right places, the bigger issue is that it was not well equipped to address countries' financial sector issues, said Wallich. "The capacity and expertise that the bank built over the Asian crisis years was substantially eroded. We were simply not equipped to do diagnostics or the analytical work; we were equipped to lend but not to [insist on] the hard quid pro quos that our lending is supposed to support. The consensus was that we were good at giving money away but not so good at designing [reform] programs."

Demographic Changes: An Ever Greater Risk

Demographic changes are the source of another huge potential risk to global financial stability, noted Jack Goldstone, professor of public policy at George Mason University. "The financial crisis marked a major shift in the global economy – what I call the great divergence in reverse. The great divergence is the leap ahead economically of the developed western nations. Reverse it, and we're looking at developing countries likely maintaining high growth rates for the next decade while rich countries will be hard pressed to grow more than 1 to 2 percent per year."

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>
> *– Christine Wallich*

In rich countries, the labor force is aging and shrinking, he noted. "Aging populations do not invest. They tend to deplete their resources and pay for current consumption." Shifting the dependency ratio from 30 percent youth to 30 percent seniors is a huge difference: "Children 0-14 don't drive cars or own homes. Any money you put into young people is an investment; you get it back. What you put into entertainment, feeding and clothing of over 65s are not good investment."

An aging population also can fall prey to reduced innovation, said Goldstone. "One can counter that with investment in basic research and efforts to boost innovation but we are not doing any of that."

Changes will be needed in housing, pensions, transport and medical care costs to accommodate this demographic shift, he noted. "But we don't seem to be able [politically] to sacrifice for the future."

The young people growing up in the developing countries are the world's labor force, he added. "If they grow up without the education to become productive citizens we all lose. The risk is that we'll see more eruptions as in North Africa. We see high youth unemployment and predatory elites precisely in the countries that are getting the future economic growth. It's not accidental – where government institutions don't provide security, people invest in family."

Roubini echoed his comments, noting the danger of having large populations with young, unskilled, unemployed and angry youth. "In Saudi Arabia, most young people get only relgious education. Of just the Sunni population, 39 percent of young people age 20 to 24 are unemployed. There is so much oil there that they can throw money at the problem, but for how long? It's a time bomb."

Migration will become an issue as this happens, said Goldstone. "We have no rational plan to take advantage of that, to harness it instead of viewing it as a threat. We have to integrate some developing countries into the mechanisms of global governance because that's where the resources are."

A Vacuum of Global Leadership and Governance

Ian Bremmer, president of the Eurasia Group, a global political risk research and consulting firm, echoed Goldstone's comments. "When the Soviet Union collapsed, we went from the G7 [group of seven industrialized nations] to the G7+1. It may have been a big deal from a security perspective, but it wasn't really a new world order from a globalization and economics perspective. The economic paradigm of globalization over last few

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years has been multinationals from advanced industrial economies, mostly democracies, reaching out to the developing world and bringing their profits closer to us, under a set of rules created by and policed by those advanced industrial countries. That kind of globalization is over. We're going to see a lot less global leadership; more volatility and political instability; and recrimination especially since the rebalancing is away from us."

While it may appear that the world is now moving from the G7+1 to the G20, in reality such global leadership is nonexistent, said Bremmer. "We would like to have global leadership reflecting the 20 largest economies in the world. We'd like to have a new Kyoto protocol, a new Doha round, a new Bretton Woods agreement. But we won't. The reality is we're living in a world that looks much more like G-zero: an absence of leadership."

Ian Bremmer and Nouriel Roubini

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>
> *– Ian Bremmer*

This is a problem for both geopolitics and economics: "Due to globalization everything is interconnected," added Roubini. "There are loads of externalities, spillovers, and contagion. To resolve these problems we need global solutions and cooperation among countries. But not only is there no political leadership, there is disagreement – on monetary and fiscal policy, on exchange rates, on trade liberalization. We live in a world where the problems are global but the solutions are still national."

If the story over the last few years was the BRIC countries, the new nations to watch are the N11 – "those said to be the next 11 big growth economies, including Pakistan, Iran, Egypt, etc.," noted Bremmer. "Will there be more inefficiency in capital flows in such countries? Of course. Will we be able to predict where those explosions will happen? We'll miss a lot. So the rebalancing is a big deal." It may take some time for countries to acknowledge this shift, Bremmer noted. "We're not in the crisis period yet. The attitude is if we kick the can down the road far enough the can becomes smaller. That's not true; it's just perspective."

Behind China's Wall

"Fundamentally the biggest political risk in the world is the U.S. - China relationship," said Bremmer. "Ambassador [Jon] Huntsman – I'm presuming, soon-to-be-presidential-aspirant Huntsman – made by far the sharpest statement by any member of the Obama administration in the last years on China, whacking them very hard on human rights issues. Huntsman is about to run and the Republicans are going to make a big political meal of China. In 2008 you could vote for either [presidential] candidate not knowing or caring where they stood on China. That will never happen again. In 2012 it will be a fundamental issue. Jeff Immelt, CEO of General Electric but also now the new [Paul] Volcker [replacing him as head of the Economic Advisory Panel] for [President] Obama is going to be pushing industrial policy because American corporations are getting their lunches eaten. Now, I'm not painting China with a bad brush – the Chinese have very strong reasons for doing what they're doing. I watched Hu Jintao in September at the United Nations, and he said Apple was producing iPods and iPads in China, and 90 percent of the profits were going to Cupertino, [Calif.], South Korea and Japan – and that was unacceptable. When they talk about level playing field, they talk about using their legal system and political influence to ensure that Chinese corporations will get a larger piece of the pie, particularly because they no longer believe the ability to manufacture lots of stuff for the United States is sustainable for them as a growth strategy."

"Where is China going? Long term, there are lots of problems there – state capitalism is ultimately inefficient, but it works well until it doesn't. China will have serious problems when they run out of cheap labor. But they're not - anytime soon. And no one today is really thinking about the time period where the big structural issues will have an effect. China will become more vulnerable to the politics of domestic constituencies or their demographics or the environmental and water crises that are coming. It will give us reason ultimately to not bet on them – but this is 20 to 30 years [down the road]."

China also presents a risk from an economic perspective, said Roubini. "Suppose China's growth remains 10 percent per year, and in 10 to 15 years it becomes the largest economy in the world. Is the rise of China going to be peaceful or aggressive? Will it be a good global citizen and play by the rules? It could have a hard landing. Today, fixed investment – cap ex spending – is 50 percent of GDP. It's not just infrastructure, not just commercial real estate. Cheap money channeled to state-owned enterprises is increasing capacity there – where there is already a massive glut of capacity. Three-quarters of global cement and steel capacity is in China. No country can be so productive and do this every year without having two problems – a massive amount of bad loans and an overcapacity problem – where they have to dump stuff in global markets. If there is a hard landing in China, there will be social and political instability."

Huang noted that while China had not experienced the global financial crisis, it did not mean it was out of the woods yet. He claimed several risk factors could undermine China's position. In 2013, Huang said, China was going to have a change in leadership at the top and middle level. While this was a routine business within the country's political system, there was something different about it this time around. "What's interesting is that this time you see much more political jockeying out in the open. Why do I think this is a risk factor? It's changing the norms and it's changing the rules of the game."

The next factor that Huang singled out was corruption, which has evolved significantly during the last 30 years. In the past, corruption was confined to certain industries, such as accounting. The difference now was that the corruption was more widespread. "Now you see it everywhere. I don't know how professors can be corrupt, but you see corruption in education. You see corruption in health and in hospitals," he said.

Huang cited a government report that was leaked to the media, which said that between 1992 and 2007 16,000 officials defected to the West because they were in danger of being caught in investigations. The total amount of money involved was some $140 billion. "You could say there's a greater political determination to root out corruption, or you could say the corruption has increased. It's hard to tell which one is the driving force," he said.

The financial risk that looms in China's future is linked to its stimulus program, Huang noted. China's stimulus program amounts to approximately nine trillion, which is much larger than that of the U.S. "You could argue that the U.S. was not doing enough and China was doing too much," Huang said. When one looks at where most of the stimulus money in China is being spent, it is in funding state owned enterprises. " Essentially you have a situation in which the aggregate demand is going up, almost all of it driven by investments, none of it by consumption," he said. "Household consumption as a share of GDP has either declined or stabilized in the last few years. It is

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now 35% of GDP, and the stimulus program has done absolutely nothing to that low ratio."


Yasheng Huang and Walter Molano

The total number of jobs created by the nine trillion stimulus program is about 22 million, Huang said. "Most of them are temporary jobs associated with building bridges and building roads in a country that has a labor force of 800 million, and there are about 230 million rural migrant workers," he pointed out.

On the face of it, because Chinese households carry very low debt, as compared to the U.S., and because household mortgages cratered the American economy, China's financial health appears to be rosy but, according to Huang, that could be misleading. "Consumer loans are very recent phenomena in China. Mortgages are a very recent phenomenon," Huang said. "But if you look at Thailand, or if you look at Korea, where the 1997 financial crisis began in the corporate sector rather than in the household sector, then you have a lot of things to worry about Chinese enterprises, particularly real estate developers. They borrowed massively during this stimulus program. The data are very, very scattered, but there is one report that indicates that the 40 top developers in China now carry about $92 billion in debt. Their profits are growing at a healthy rate, but it's not nearly one-third the rate of the growth of the debt."

Huang noted that in China the most serious social risk factor, which is tied to the economic risk factor, is looming unemployment. This is demonstrated by the fact that 30 per cent of post graduates cannot find jobs in China. Huang believes that this has happened because of a huge education expansion. "Essentially this delayed their entry into the labor force by three years and four years. And Chinese people have very high psychological expectations of the college degrees. So they don't take low paying jobs. But that's not going to continue. My concern is that when these people come back to the low end labor force, you're going to have a problem. The reason is that the Chinese leaders are operating under the illusion of having crossed what is known as Lewis' turning point, a point at which a country is changing from a labor-surplus situation to a labor-shortage situation. They're requiring the companies to pay very high wages. So when these people rejoin the labor force, you're going to have a nasty situation in which the labor cost will have to come down somehow. And that's going to have some political issues."

DeLong shared Huang's concern over joblessness in China, noting vividly that Chinese government officials do not want mass unemployment, lest it lead to the "heads of State Council members being carried around on pikes."

According to Huang, the final risk factor was China's foreign policy. He noted that the arrogant attitude of the people in charge of foreign economic policy could have unpleasant repercussions. "In the last few years their view is that the West has collapsed and the Chinese model has triumphed. And so they manage to basically antagonize everybody else that matters to China. But when you talk to the people in charge of the day to day affairs, there is a deep sense of insecurity. And there are some dire, dire warnings issued by these people. So I'm not saying that China is going to have a crisis, but I think we cannot rule it out completely," Huang said.

These matters were debated during the question and answer session following Huang's presentation. While Harrison claimed that Chinese government policy had led to rapid development of infrastructure in the country, Huang responded that the tradeoff was between ports and schools. China's lapses in developing its human capital have affected the country's ability to remain competitive over the long run.

Brazil: A Risk of Being Disappointed

Brazil is another bright spot in the global economic landscape that could be coming under threat from various sources. Walter Molano, head of research at BCP Securities, an investment bank focused on emerging markets noted that Latin America has been lucky during the last decade. "Ten years ago, in 2001, we were about to turn off the lights on Latin America," he said. "In fact we were probably about to start another lost decade like the one through the 1980s. In 1999 Brazil had gone through a maxi devaluation. In 2000, Ecuador defaulted. In 2001, Uruguay defaulted, and in 2002 Argentina defaulted. We were basically just trembling, holding onto our fingernails. Here we sit ten years later and we're just aglow. Latin America's doing everything right."

What brought about this change? Molano asked. "What changed internally?" His response: Absolutely nothing changed. "We had one thing that changed that occurred in August 2001, which was China. China joined the WTO in 2001 and starting in October, commodity prices started to take off – and they haven't stopped climbing. They went through a little bit of a pause during the Lehman debacle. But they haven't stopped climbing. China and India represent 40% of the world's population…Latin America's a commodity producer. We are a derivative of China. That's the final line. As a result we live off the tail of the Asian market and off the tail of what happens in commodities."

According to Molano, the key to sustainable development lies in improving productivity. Despite being a major producer of commodities such as iron ore, soybean and sugar, Brazil "refuses to invest in ports," Molano argued. Newspapers are filled with photographs of lines of trucks stretching as far as 30 kilometers and taking as much as a week to discharge their cargo before returning to the farms. In contrast, the Brazilian government has invested heavily in subsidizing companies like plane manufacturer Embraer, which is mystifying since investments in infrastructure would benefit broader sections of the economy, he added.

"In other words, what you have in Brazil is a closed economy," Molano pointed out. "When you add exports and imports and you divide it by GDP, you find one of the most closed economies in the world. It's almost as closed as sub-Saharan Africa. When you have a closed economy, what does it give your producers? It gives them monopoly powers. In fact it gives them the right to provide goods and services at whatever price and at whatever quality that they want to produce or to then sell. This is why you have the second-highest seller rates in the world in Brazil. This is why the costs of electronic goods, automobiles, any kind of services, are so much higher in Brazil."

> "You have a credit boom because we've seen that credit has increased six-fold in Brazil over the last seven years. This is a very dangerous situation and one very similar to the one that we saw here in the United States."
>
> *–Walter Molano*

These factors, Molano noted, have prevented Brazil's economy from becoming more competitive. "What you have now is an investment boom based on this myth of the BRIC, on this myth of the commodity producer," he said. "You have a credit boom because we've seen that credit has increased six-fold in Brazil over the last seven years. This is a very dangerous situation and one very similar to the one that we saw here in the United States. I realize that Brazil hasn't done anything to improve its productivity and its competitiveness, and what we see is that we're in for another disappointment in Brazil, and to a lesser extent in the other Latin American countries."

Bremmer, however, seemed more optimistic about Brazil's political and economic prospect. In Brazil, he noted, the markets were skittish about former president [Luiz Inácio] Lula da Silva, saying he'd be another Hugo Chávez, but actually he was quite consistent in his policy. "Brazil finally became a country of future that actually made it," he noted. "But [newly elected president] Dilma Rousseff does not have the popularity Lula had. She has made some big promises around minimum wage; the pensions coming on are going to be more expensive. She's a centrist in most ways, so it's not like her inclination will be to dramatically change policy – but her ability to resist greater populism from Congress is going to be extremely compromised over the next 12 to 24 months. On balance I like Brazil's trajectory, but I think that from a political perspective that story may be played out right now."

Sovereign Debt

Another issue to monitor closely, said Roubini, is sovereign risk in advanced economies. "Public debt will rise to over 100 percent of GDP for most advanced economies in the next two to three years," he noted. "So the problems of sovereign risk, of reducing budget deficits, and of stabilizing public debt are not just challenges for the Euro zone periphery; they will be the biggest challenges advanced economies will be facing."

Several factors in the United States in particular bear considering, added Roubini, including "deleveraging of the household sector, high unemployment, a housing double dip, state and local government problems, and gridlock in Congress." Pushing these issues off to the future could cause a bond market revolt.

The high-growth developing countries are another source of risk. "Emerging markets are growing very fast," said Roubini, noting that there is a danger of their overheating. "They have been slow in tightening monetary policy or using exchange rates to control inflation, and now inflation is rising. In many of these countries, two-thirds of the consumption basket is energy, food and transport. So the tradeoff is between wanting to maintain high growth for political reasons, and controlling inflation."

In the Euro zone periphery, the issue is not merely one of public debt, explained Roubini. "Many of the financial systems are in trouble, especially in countries where the housing bubble burst. They need to clean up the banks and may have to restructure liabilities and deal with bad assets. These countries were exporting low value-added labor-intensive goods and lost market share to China, central Europe, and other emerging markets. So wages were rising faster than productivity. There was a widening of current account deficits, and the final nail in the coffin was the sharp appreciation of the euro. How will they restore competitiveness and growth? While the risk of a Euro zone collapse is much less than it was a

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–Nouriel Roubini

year ago, these are chronic fundamental problems that will take many years to resolve."

The best solution might not be the most palatable one, he noted. "The crisis started with too much private sector debt; socialization of private losses then caused public debt," said Roubini. "Some of these sovereigns got into such debt that they lost market access. Now we have super-sovereigns like the IMF, ECB you name it - bailing out sovereigns. So we're kicking the can down the road: private debt, public debt, supranational debt. Now, there's not going to be anybody coming from the moon or Mars to bail out the IMF, European Central Bank, etc."

Roubini said there were essentially four options: "One is to grow the denominator – to have enough economic growth. But with too much private and public debt, economic growth will be slow – so we're not going to grow ourselves out of the debt problem. The second way would be to save more. But if everybody suddenly consumes less and saves more, demand falls, output falls and therefore your debt-to-GDP ratio rises again. The third option would be inflation – but this causes lots of collateral damage. Realistically, the fourth solution is debt restructuring. We haven't wanted to do this, but it may be necessary or unavoidable in some situations."

Complexity, Uncertainty, and Global Governance

Perhaps the main conclusion of the gathering of experts is that the most salient problems topping the global agenda looking down the road are complexity and uncertainty as drivers of systemic disruptions. James warned against a misplaced search for certainty and guarantees. "There's a desperate search for certainty," he said. "But this just makes us in the end very vulnerable. Maybe a conference like this should be aimed at showing that there is more uncertainty and vulnerability around."

"Harold [James] warns against it – and yet people still seek it," said Carruthers. "It's a social fact: People do like certainty and find lots of ways to manage uncertainty."

"Societies are complex systems," said Goldstone. "If you had 10 people with cholesterol over 200 and blood sugar problems, you can predict that 60 percent of them will have heart attacks before they reach age 60. And you can probably reproduce that result with a high degree of confidence with similar groups of people with similar characteristics and differentiate from those that don't. But can you tell which one of those people is going to have a heart attack next Tuesday? No. It's not within the realm of what science can produce. … A lot of our models are quite good. Everybody knew that the housing prices could not continue to go up faster than per capita income indefinitely. It was just a question of when the current cycle was going to crest and what were going to be the effects of the various Moody-guaranteed and AIG-insured commodities that rested on that trend. There were a lot of models that claimed to predict that. Remember, AIG said, 'Our models say there's almost no chance of us losing a dollar.' So sometimes I think there's an excess of faith in models that aim for that kind of pinpoint accuracy, and I think we need to be more practical about testing the models in the field and making sure that they run and conform to the empirics. When we do that we're usually OK, but then we get broad trend analysis, we don't get pinpoint predictions." Bremmer pointed out that the demand for analysis and predictions seems to be growing and greater than ever. "I've got a firm - the Eurasia Group, and I

> "Welcome to the future. This will be a constant struggle. We need leadership, citizenship, and dialogue."
>
> *–Donald Lessard*

started back in 1998, got about 25 folks," said Bremmer. "And if I think about our analysts, what percentage of our analysts right now are on call for clients outside working hours – well, it's most of our Europe team, Middle East, Japan, half of our energy guys and because of this potential U.S. [government] shutdown, our U.S. team as well. Since 1998 we've never had that percentage of our folks on outside call."

"In North Korea, you've got a totalitarian regime that's about to transition to a 27-year-old," said Bremmer. "This guy is unknown not only internationally, but in his own country. The North Koreans have already shown a significant willingness to be really provocative. We're ignoring North Korea right now; they hate that. They particularly hate it when they've had a bad harvest, as they're in the middle of right now."

In India, "we know that it's a local story," said Bremmer, "but that 2G scandal is massive and is hitting everybody from all parties – they can get the budget through but they can't do much else."

"Europeans have never been great at saying what they are but know what they're not," said Bremmer. "They know they're not Turkey, not imams who don't speak German, or French women who wear headscarves. In a G0 world, it becomes much more evident what they're not. While all the headlines are all about the euro and fiscal policy let's also recognize the underlying

Alejandro Werner, Riordan Roett, Michael Lounsbury and Stephen Kobrin

social and cultural drivers. If you compare Angela Merkel's speech that says 'multiculti' is not working with David Cameron's recent speech on the end of multiculturalism – it's as if they had the same speechwriter. We're seeing it across Europe. It will create more cohesion in Europe over time. While everyone's talking about the economic drivers, the political drivers are interesting."

"Globalization on the one side is continuing – the backlash has been limited so far– we still have plenty of international trade in goods, services, labor, capital, information and technology – but we know globalization has side consequences," said Roubini. "It has been associated with more frequent and virulent economic and financial crises; it has been associated with greater income and wealth inequality within countries and greater emergence of growth across countries. Where the pressure exists on resources – energy, food, water, etc. – is this going to be sustainable?"

Action Items

Global Governance. The changing of the guard in the global political economy is likely to bring about some degree of instability, volatility, and disorder, at least for some period of time. Conference participants agreed on the importance of turning global governance into a solution as opposed to part of the problem leading to the crisis. Goldstone provided many economic, financial, political and social examples of the growing "global governance gap." Bremmer and Roubini have coined the term, "G-zero" world, i.e. one in which global leadership is lacking. Two processes have converged to create this vacuum of global leadership, namely, the crisis in the rich economies, which is as much political-economic nature as it is about a declining confidence in the future, and the growth of the emerging economies. As Riordan Roett, professor of political science at the Johns Hopkins University, reminded us, there is no turning back on the rise of the emerging economies. Lounsbury called attention to the fact that something fundamental was wrong with the model of global governance and that "we need a wider array of voices at the table."

Still, Guillén reminded participants that emerging economies are not yet ready to assume complex global leadership roles, as former Mexican foreign minister Jorge Castañeda has recently argued. Stephen Kobrin, a professor at the Wharton School, noted that the emerging economies wanted more of a say at international agencies which had been founded on principles and values that they do not necessarily share. From an Indian perspective, Suman Bery issued the reminder that the crisis had not been such a big deal for emerging economies, and that growing hostility between in the two-speed world was creating new threats. "Welcome to the future," said Donald Lessard, a professor at the MIT Sloan School of Management. "This will be a constant struggle. We need leadership, citizenship, and dialogue."

Regulation. A second crucial issue for future action had to do with regulation and the ideas informing it. "Self-regulation doesn't work without some form of independent oversight," noted Lounsbury. Market fundamentalism as a global ideology contributed to miscoding of uncertainty as risk, as Carruthers pointed out. The failure to grasp that complex systems are subject to disruption and breakdown and this fact calls for a better understanding of the architecture of markets with a view to designing bells and whistles, and buffers and cushions. Werner noted that his experience as deputy treasury secretary of Mexico during the crisis revealed to him the importance of keeping a safety margin in fiscal and monetary affairs to cope with disruptions. And he also suggested very strongly that regulation should be mostly undertaken by institutions with a long-term perspective, such as independent central banks. Francisco Flores-Macías, an instructor at the Lauder Institute, noted that what the global economy needs is "more resilient and adaptive regulatory systems."

Humility. A third action item included a dual call for humility in terms of the ability of scholars, experts and policymakers to understand the complexities of the global economic and financial system, on the one hand, and for a renewed effort to collect more data and develop better criteria for evaluation, as suggested by Mitchell Orenstein, a professor at the School of Advanced International Studies of the Johns Hopkins University. Participants also underlined the importance of communicating to society why certain policies are necessary. "More modesty, less arrogance," declared Matt Tubin, a post-doctoral scholar in Political Science at the University of Pennsylvania. "Don't speak so confidently about what we need to do when we do not understand what we don't know." Werner argued in favor of involving a wider array of stakeholders in the policymaking process. In this connection, Lounsbury warned against easy fixes to policy participation, observing that social movements take time to coalesce around constructive proposals. Werner also observed that academics tend to be too focused on the wrong topics and approaches given the incentives for publication and tenure. He called for more policy-oriented research.

> "Self-regulation doesn't work without some form of independent oversight."
>
> *–Michael Lounsbury*

The conference was rich in multi-disciplinary conversation and exchange. In addition to recognizing the limitations in our theories and methodologies when dealing with systemic crises, we emphasize the need to engage in a more effective multi-disciplinary research agenda, with each of the disciplines—economics, political science, psychology, sociology, history, etc.—contributing a number of key elements to the theoretical and methodological toolkit available to the research and policy communities, in three respects. The first has to do with overcoming simplistic assumptions about human behavior so as to fully understand the potential impact of human agency in the creation of systemic risks. Individual preferences, cognitive biases, political inclinations, and cultural understandings need to be incorporated into more realistic, although perhaps less parsimonious models of behavior by individuals, groups, and organizations. The second is to use the diverse methodologies and "ways of knowing" of the various disciplines to cast a wide net over the potential interactions among key variables that may pose systemic risks. Traditional statistical data and analyses need to be supplemented by case studies, ethnographies, quasi-experiments, and historical research in order to capture as many of the different kinds of systemic interactions among variables as possible.


Lite Nartey, Michael Useem and Jack Goldstone

The third essential tool for a better understanding of systemic crisis is to develop mechanisms for inter-disciplinary learning and sharing of key theories, methodologies, and findings. Research incentives within each discipline tend to discourage boundary-spanning work. Yet, the complex and systemic character of modern societies requires scholars, experts and policymakers to move beyond multi-disciplinary conversations and to embrace an truly inter-disciplinary effort to develop new theories and methodologies to cope with global risks.

Stay on the Alert. A fourth action item was to stay on the alert. Goldstone pointed to risks of disease spread, nuclear proliferation, illicit trade, and population change as challenges that will require extensive analysis individually and in interaction with one another. Sinziana Dorobantu, an instructor at the Wharton School, noted that short-term thinking has taken over, reducing our ability to focus on systemic interactions as trends unfold over the long run. She referred to compensation systems, demographics, political and electoral cycles, and cognitive biases as the key drivers of this reduction in time horizons, which could bring about more disruptions and systemic crises. Adopting a comparative and historical perspective on global risks was proposed as a key way to overcome our very human inclination to focus on the immediate and neglect the bigger picture of global interactions across time and space.

Psychology, economics, politics, culture, social structure and technology are so closely intertwined that no discussion of global risks can conclude without a call for a continuing dialogue across disciplinary boundaries as well as between the academic and policy domains. While the world changes, our conceptual tools remain recalcitrant and our modes of thinking fossilized. As Henisz noted, "academia is organized in disciplinary silos that do not reward and may even penalize boundary spanning. Efforts to craft interdisciplinary education have struggled against the inherent tendency to look inward and focus on a narrower and more conventional set of shared assumptions and methodologies. Overcoming this tendency requires effort at reaching out and engaging with scholars at the frontier of their discipline as well as managers and policymakers who are masters of their craft." Such a fresh, multidisciplinary conversation about global governance and regulation has the potential to yield solutions commensurate with the magnitude of the global risks before us. We hope this document has persuaded you to become part of this agenda. ■

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Global Risk

New Perspectives and Opportunities

The economic and financial crisis has made the analysis and management of global risks the most urgent topic on the agenda. From corporate executives and policymakers to academics, most experts did not imagine or foresee not only the scope of the crisis but also its systemic effects. Seeking to explore the origins of the crisis, the lessons learned, and the potential future threats, the Lauder Institute and the Penn Lauder Center for International Business Education and Research brought together a multidisciplinary group of intellectuals and policymakers from academia and international organizations at the first Globalization TrendLab Conference on April 7-8, 2011 in Philadelphia, Pennsylvania. The conference was sponsored by Santander Universities. This document presents the main aspects of the analysis and the conclusions reached during two days of intensive debate.

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