VITAL SPEECHES
OF THE DAY

JUNE 2009
Volume LXXV No. 6

$8.00

242 **My Report Card**
Address by BARACK OBAMA, President of the United States

245 **An Economic Outlook**
Address by DONALD L. KOHN, Vice Chairman, Federal Reserve Board

249 **Saving Money, Saving Lives**
Testimony of JOHN C. GOODMAN, Ph.D., President, CEO and Kellye Wright Fellow National Center for Policy Analysis

253 **The Digital Revolution Comes to Marketing**
Address by MICHAEL MENDENHALL, Senior Vice President and Chief Marketing Officer, Hewlett-Packard Company

256 **Change Can Be Good**
Address by JACK MA, Chairman and CEO, Alibaba Group

258 **A Time for Transatlantic Leadership**
Address by JIM QUIGLEY, CEO, Deloitte Touche Tohmatsu

261 **Innovation**
Address by JUDITH RODIN, President, Rockefeller Foundation

264 **Preserving the Land Grant Act in the Era of the Modern Research University**
Address by RICHARD HERMAN, Chancellor, University of Illinois at Urbana-Champaign

268 **The Future of Telecommunications**
Address by DIDIER LOMBARD, Chairman and CEO, France Telecom

270 **Customer Satisfaction Is the Most Important Thing**
Address by IVAN SEIDENBERG, Chairman and CEO, Verizon

274 **Life After Liquidation of the Fourth Estate**
Address by JOSEPH P. DUGGAN, Visiting Professor in Politics and Communication at Tecnológico de Monterrey, Campus Estado de México, former newspaper editor and White House speechwriter

278 **The Future of the U.S. ICBM**
Address by JOHN CLAY, Vice President, Missile Systems, Strike and Surveillance Systems Division, Northrop Grumman Aerospace Systems

281 **Improving Financial Stability**
Address by CHARLES I. PLOSSER, President and CEO, Federal Reserve Bank of Philadelphia

286 **Haiku of the Day**
Address by ELLEN TANIS AWAD, Director of Student Activities and Greek Life at Hope College

THE BEST THOUGHTS OF THE BEST MINDS ON CURRENT NATIONAL QUESTIONS

IMPARTIAL · CONSTRUCTIVE · AUTHENTIC

My Report Card

I HAVE DONE A LOT OF GREAT THINGS AND THERE IS MORE TO COME

Address by BARACK OBAMA, President of the United States

Delivered to a Town Hall, Arnold, Missouri, April 29, 2009

Thank you so much. Thank you. Everybody please have a seat. Have a seat. Thank you so much. What a wonderful introduction. It's good to be out of Washington, good to be back in the Midwest.

Let me, first of all, ask everybody to give a huge round of applause to Linda for the great introduction and everything that she's been doing in the community. Thank you so much.

I've got a few other friends who are here—you may know them, I want to make sure that I acknowledge them. One of, I think, the finest members of Congress that we have and somebody who's just been a great friend of mine, she is somebody you want in the foxhole with you when you got a tough fight—please give a huge round of applause to Claire McCaskill.

We've got one of the finest new governors in the country, Jay Nixon. Where did Jay go? There he is. An outstanding Secretary of State and somebody who I think may turn out to be pretty good in Washington if she just so decides—Robin Carnahan. We've got Attorney General Chris Koster here. State Treasurer Clint Zweifel. A great friend who was with me from the start—Susan Montee, your State Auditor. We have our outstanding host today, Mayor Ron Counts, of Arnold.

We've got Congressman Russ Carnahan, who is voting on the budget today, but I want everybody to give him a big round of applause anyway.

I want to thank everybody here at Fox High School for their hospitality. I want to thank your lovely school superintendent, who is just doing an outstanding job. Please stand up. I want to thank the Warriors for the basketball jersey——which I will wear with pride—yeah! If I ever get to play basketball again—-- they've been keeping me a little busy.

It is great to be back in the middle of America, where common sense often reigns. And this reminds me of why I like to get out of Washington now and again.

The last time I was in Missouri was just under six months ago, at a high school a lot like this one. We were in Springfield; it was two days before the election, and I was making my final case to the American people. And it was just an unbelievable crowd, bigger than anything anybody had expected. And so we're here in Missouri to—we were here in Missouri at the end of a long journey to the White House, and so now I want to come back and speak to you at the beginning of another long journey. Today marks 100 days since I took the oath of office to be your President. One hundred days. It's a good thing. Thank you. Thank you.

Now, back in November, some folks were surprised that we showed up in Springfield at the end of our campaign. But then again, some folks were surprised that we even started our campaign in the first place. (Laughter.) They didn't give us much of a chance. They didn't think we could do things differently. They didn't know if this country was ready to move in a new direction.

But here's the thing—my campaign wasn't born in Washington. My campaign was rooted in neighborhoods just like this one, in towns and cities all across America;

VITAL SPEECHES OF THE DAY

POLICY OF VITAL SPEECHES

The publisher of *Vital Speeches of the Day* believes that it is indeed vital to the welfare of the nation that important, constructive addresses by recognized leaders in both the public and private sectors be permanently recorded and disseminated—both to ensure that readers gain a sound knowledge of public questions and to provide models of excellence in contemporary oratory. These speeches represent the best thoughts of the best minds on current national and international issues in the fields of economics, politics, education, sociology, government, criminology, finance, business, taxation, health, law, labor, and more.

It is the policy of the publisher to cover both sides of public questions. Furthermore, because *Vital Speeches of the Day* was founded on the belief that it is only in the unedited and unexpurgated speech that the view of the speaker is truly communicated to the reader, all speeches are printed in full. When it is necessary to condense a speech for reasons of unusual length or the use of extraneous matter, it is so stated. Speeches featured in *Vital Speeches of the Day* are selected solely on the merit of the speech and the speaker, and do not reflect the personal views or pre-established relationships of the publisher.

Subscribers are urged to call the editor's attention to any speeches that have impressed them as outstanding so that copies may be secured for review.

Editor
Tom Daly IV
vseditor@mcmurry.com
(843) 881-8733

Creative Director
Amy Wimmer

Production Specialist
Dean Shirley

Marketing Director
Jennifer Zuverink

Product Manager
Jenny Babich

VP/Center for Professional Excellence
Scott M. Accatino

Telephone (888) 303-2373
Fax (602) 427-0374

Vital Speeches of the Day (ISSN 0042-742X) is published monthly by McMurry, McMurry Campus Center, 1010 E. Missouri Ave., Phoenix, AZ 85014.

SUBSCRIPTIONS

U.S., $75.00/year; Foreign, $95.00/year
E-mail vssubs@mcmurry.com
Back issues, $8.00, plus postage.

Microfilm and microfiche editions, $38.00 per volume, subscribers only.

Vital Speeches is indexed in the *Reader's Guide to Periodical Literature.* An annual index is printed each December and distributed to all subscribers. Cumulative Indicies available: Volumes 1-25 and Volumes 26-50, $75.00 each, plus postage. Volume Binders for *Vital Speeches*, $15.00 plus postage.

Publisher Periodical postage paid at Phoenix, AZ and additional mailing offices.

POSTMASTER: Send address changes to 1010 E. Missouri Ave., Phoenix, AZ 85014.

rooted in folks who work hard and look after their families and seek a brighter children—future for their children and for their communities and for their country.

It was driven by workers who were tired of seeing their jobs shipped overseas, their health care costs go up, their dreams slip out of reach. It was grounded in a sense of unity and common purpose with every single American, whether they voted for me on Election Day or voted for somebody else. It was energized by every citizen who believed that the size of our challenges had outgrown the smallness of our politics. My campaign was possible because the American people wanted change.

I ran for President because I wanted to carry those voices—your voices—with me to Washington. And so I just want everybody to understand: You're who I'm working for every single day in the White House. I've heard your stories; I know you sent me to Washington because you believed in the promise of a better day. And I don't want to let you down.

You believed that after an era of selfishness and greed, that we could reclaim a sense of responsibility on Wall Street and in Washington, as well as on Main Street. You believed that instead of huge inequalities and an economy that's built on a bubble, we could restore a sense of fairness to our economy and build a new foundation for lasting growth and prosperity. You believed that at a time of war, we could stand strong against our enemies and stand firmly for our ideals, and show a new face of American leadership to the world.

That's the change that you believed in. That's the trust you placed in me. It's something I will never forget, the fact that you made this possible.

So today, on my 100th day in office, I've come to report to you, the American people, that we have begun to pick ourselves up and dust ourselves off, and we've begun the work of remaking America. We're working to remake America.

Now, we've got a lot of work to do, because on our first day in office we found challenges of unprecedented size and scope. Our economy was in the midst of the most serious downturn since the Great Depression. Banks had stopped lending. The housing market was crippled. The deficit was at $1.3 trillion. And meanwhile, families continued to struggle with health care costs, too many of our kids couldn't get the education they needed, the nation remained trapped by our dangerous dependence on foreign oil.

Now, these challenges could not be met with half-measures. They couldn't be met with the same old formulas. They couldn't be confronted in isolation. They demanded action that was bold and sustained. They demand action that is bold and sustained. They call on us to clear away the wreckage of a painful recession, but also, at the same time, lay the building blocks for a new prosperity. And that's the work that we've begun over these first 100 days.

To jumpstart job creation and get our economy moving again, we passed the most ambitious economic recovery plan in our nation's history. And already, we're beginning to see this change take hold. In Jefferson City, over 2,500 jobs will be created on Missouri's largest wind farm, so that American workers are harnessing clean, American energy. Across the state, roughly 20,000 transportation jobs will be supported by the Recovery Act, so that Missourians are rebuilding your roads, your bridges, your rails.

To restore fairness to our economy, we've taken several steps with Congress to strengthen the middle class. We cut taxes for 95 percent of American households through a tax cut that will put $120 billion directly into your pockets. We finally signed a law long overdue that will protect equal pay for equal work for American women. We extended health care to millions of children across this country.

We launched a housing plan that has already contributed to a spike in the number of homeowners who are refinancing their mortgages, which is the equivalent of another tax cut for them. And if you haven't refinanced, you might want to take a look and see if it's possible, because that can save people a lot of money. We've taken steps to unfreeze the market for auto loans and student loans and small business loans. And we're acting with the full force of the federal government to ensure that our banks have the capital and the confidence to lend money to the families and business owners who keep this economy running.

Now, even as we cleared away the wreckage, I've also said that we can't go back to an economy that's built on a pile of sand—on inflated home prices and maxed-out credit cards; on over-leveraged banks and outdated regulations that allowed the recklessness of just a few people to threaten the prosperity of all of us.

So that's why I introduced a budget and other measures that build on the Recovery Act to lay a new foundation for growth—a foundation that's built on five pillars that will strengthen our economy and help us compete in the 21st century: number one, new investments in education that will equip our workers with the right skills and training; number two, new investments in renewable energy that will create millions of jobs and new industries; number three, new investments in health care that will cut costs for families and businesses; number four, new savings that will bring down our deficit; and number five, new rules for Wall Street that reward drive and innovation.

Now, I've got to say that some of the people in Washington have been surprised—they said, boy, he's so ambitious; he's been trying to do so much. Now, maybe they're not accustomed to this, but there's no mystery to what we've done. The priorities that we've acted upon were the things that we said we'd do during the campaign. I mean, it's not like anybody should be surprised. The policies we've proposed were plans we talked about for two years, in places like this, all across the country with ordinary Americans. The changes that we've made are the changes we promised. That's what you should expect from a President. You may not always agree with me, but if you take a look at what I said I was going to do when I was running for office, and you now look at what we are in the middle of doing—we're doing what we said we'd do.

Now, after 100 days, I'm pleased with the progress we've made, but I'm not satisfied. I'm confident in the future, but I'm not content with the present—not when there are workers who are still out of jobs, families who still can't pay their bills; not when there are too many Americans who can't afford their health care, so many of our children being left behind and our nation is not leading the world in developing 21st century energy. I'm not satisfied. And I know you aren't either. The crisis that we're confronting was many years in the making; it will take us time to overcome it. We've come a long way, we can see the light on the horizon, but we've got a much longer journey ahead.

And one of the encouraging things for me is the fact that the American people know this. You know that our progress has to be measured in the results that we achieve over many months and years, not the minute-by-minute talk in the media. And you know that progress comes from hard choices and hard work, not miracles. I'm not a miracle worker. We've got a lot of tough choices and hard decisions and hard work ahead of us. The 100th day might be a good time to reflect on where we are, but it's more important to where we're going that we focus on the future, because we can't rest until our economy is growing and we've built that new foundation for our prosperity.

We can't rest until we reform those outdated rules and regulations that allowed this crisis to happen in the first place. And that's why I've called for tough, new, common-sense rules of the road that punish abuse and reward drive and innovation in the financial sector. I expect a bill to arrive on my desk for signature before this year is out. We are going to make sure this kind of crisis does not happen again.

We can't rest until we have schools that prepare our children for the challenges of the 21st century. And we've already made historic investments in education and college affordability. I was talking to your superintendent about all the wonderful things that she's going to be able to do with some of the money that came out of the recovery package. We're going to continue to help our schools meet high standards and close achievement gaps. And we're going to reward teachers for performance and give them new pathways for advancement. We are going to seek the goal of once again having the highest proportion of college graduates in the world—we're going to do it by 2020.

We can't rest until we harness the renewable energy that can create millions of new jobs and new industries. The Recovery Act will double the supply of renewable energy, but the only way to truly spark an energy transformation is through a gradual, market-based cap on carbon pollution so that energy, clean energy is the profitable kind of energy. And we can do this in a way that creates jobs. That's how we can grow our economy, enhance our security, and protect our planet at the same time.

I don't think we can rest until we have a 21st century health care system that makes sense——one that cuts costs for families and businesses across America. That's why we invested in preventative care, we've invested in electronic records; that's why my budget makes a down payment on reform that will finally make quality health care affordable for every American. And I look forward to working with both parties in Congress to make this reform a reality in the months to come.

And we can't rest until we restore the fiscal discipline that will keep us from leaving our children with a mountain of debt. And working with people like Claire McCaskill, we have already put forward a budget that will cut the deficit in half by the end of my first term. We've launched a procurement reform effort that will greatly reduce no-bid contracts and will save $40 billion. We're going through the budget line by line, page by page; we've already identified more than 100 programs to reduce or eliminate because they don't work. And I've personally asked the leadership in Congress to pass into law rules that follow the simple principle: You pay for what you spend—so that government acts the same way any responsible family does. If you want a tax cut, you got to pay for it; if you want a new program, you got to pay for it. Tell the American people the truth—how are you going to pay for it?

And finally, we can't rest until America is secure and our leadership is restored. And that's why I've begun to end the war in Iraq through a responsible transition to Iraqi control. It is their country, they need to take control. That's why we have a new strategy to disrupt and dismantle and defeat al Qaeda in Afghanistan and Pakistan. That's why we've renewed our diplomacy to reduce the spread of nuclear weapons, to speak directly to our adversaries, and strengthen relations in the hemisphere.

And that's why we have rejected the false choice between our security and our ideals. That's why I ordered the closing of the detention center at Guantanamo; that's why I prohibited the use of torture——because America is stronger than any enemy—and we always have been—precisely because we do what's right not just when it's easy, but when it's hard. That's what sets us apart.

We're living through extraordinary times. We didn't ask for all the challenges that we face, but we're determined to answer the call to meet them. That's that spirit I see everywhere I go. That's the spirit we need to sustain, because the answer to our problems will ultimately be found in the character of the American people. We need soldiers and diplomats, scientists, teachers, workers, entrepreneurs. We need your service; we need your active citizenship. That's why I recently signed a bill that will create hundreds of thousands of opportunities for the American people to serve. That's why I will continue to ask for your help and your ideas and your support to make the changes that we need.

I want to warn you, there will be setbacks. It will take time. But I promise you I will always tell you the truth about the challenges that we face and the steps that we are taking to meet them. I will continue to measure my progress by the progress that you see in your own lives. And I believe that years from now we are going to be able to look back at this time as the moment when the American people once again came together to reclaim their future. That's what this is about.

Thank you, everybody. Thank you. ◆

An Economic Outlook

THE U.S. ECONOMY IS FLEXIBLE AND HEALTHY

Address by DONALD L. KOHN, Vice Chairman, Federal Reserve Board

Delivered as the Hutchinson Lecture, Newark, Delaware, April 20, 2009

The Economic Outlook

I'm pleased to be here and honored to be invited to deliver the Hutchinson Lecture. Although I never met Harry Hutchinson, I very much wish I had. Like Harry, I received a Ph.D. in economics from the University of Michigan, and my professional interests have centered on money and banking. Given Harry's expertise and his keen interest in teaching, I'm sure he would have had valuable insights about the recent financial turmoil to share with all of us. In this talk, I will focus on the economic outlook, which, of course, has been significantly influenced by that turmoil. After a brief review of recent developments, I will discuss the factors that are likely to support a resumption of economic growth over coming quarters as well as the likely contour of that recovery.[1]

▸ Recent Developments

The U.S. economy and financial markets have been through an extraordinarily difficult period. The downturn in economic activity that has been under way since late 2007 steepened considerably last fall as the strains in financial markets intensified, credit conditions tightened further, and asset values continued to slump. Partly in response to the financial turmoil, consumer and business confidence plummeted, and nearly all major sectors of the economy registered steep declines in activity. In all, real gross domestic product (GDP) dropped at an annual rate of 6-1/4 percent in the fourth quarter of 2008; the Commerce Department's advance estimate for the first quarter of 2009--which will be released next week--is expected to show another sizable decrease. This recession seems likely to be among the deepest and longest in the post-World War II period.

Labor market and production data continued to deteriorate through the first quarter. Businesses shed more than 650,000 jobs in March, the fifth consecutive month of job losses in the neighborhood of 600,000 or more, and the unemployment rate jumped to 8-1/2 percent. Moreover, the number of new claims for unemployment insurance benefits remained elevated in early April, which suggests that job losses have remained appreciable. And in the industrial sector, another large drop in output was recorded in March as manufacturers continued to cut production in response to weak demand and excess inventories.

The recent spending indicators, however, have been more mixed. On the negative side, businesses have continued to make sharp reductions in their capital expenditures, and exports have been hard hit by the steep drop in economic activity abroad. However, there are a few tentative signs that the pace of decline in some other key components of demand may be lessening. To be sure, consumer spending continues to suffer the effects of the poor job market and the sizable losses of equity and housing wealth over the past two years. But after smoothing through the data for the first three months of 2009, consumption appears to have steadied some after a sharp drop in the summer and autumn of 2008. And in the housing sector, the declines in sales and construction of single-family homes have abated in the past couple of months--in part, perhaps, because of the low levels of mortgage interest rates and the greater affordability of housing. As demand firms, and once inventories of houses and a broad range of goods are brought into line with sales, economic activity should begin to stabilize.

The crosscurrents in the recent data and a bit more favorable financial news of late stand in contrast to the uniformly bleak picture of a few months ago. These developments may be an early indication that conditions are falling into place for real GDP to decline at a slower rate in the second quarter and to stabilize later this year. I want to emphasize that the high-frequency data are very noisy, and considerable uncertainty attends the near-term path of the economy. Still, I don't think it is premature to start to ponder the shape that a recovery--when it occurs--would be likely to take.

▸ The Outlook for Recovery

Consideration of the likely shape of the recovery depends very much on understanding how we got to where we are now. For a number of years earlier in the decade, U.S. economic growth was supported importantly by rapid increases in consumption and housing, which, in turn, were fueled by an extended surge of global credit. Housing demand was propelled, in part, by persistently low long-term interest rates, loose underwriting standards on mortgages, and, for a while, expectations of continuing increases in house prices that resulted in the building of too many houses and the elevation of home prices to unsustainable levels. These same developments fed a surge in consumption through the effects on wealth of rising house prices and through various financial innovations that allowed many households to liquefy their housing wealth. Financial intermediaries were further exposed by generally inadequate compensation for risk and increased leverage. As the housing boom petered out and then reversed, both households and lenders found themselves overextended, developments that led to a mutually reinforcing pullback in spending and lending. The dynamics of this adjustment, which coincided with the collapse of the global credit boom, helped push the U.S. economy into deep recession.

Economic policymakers have moved aggressively to counter the threat to economic stability by, in effect, filling some of the gap in private lending and spending with government lending and spending. Because the disruptions in the economy have been so closely related to problems in the financial sector, many of the policy measures have been focused on financial institutions and markets and on countering the tightening of financial conditions that occurred as lenders became more risk averse and took steps to conserve capital and liquidity. These measures should result in improved credit conditions for businesses and households and thus are expected to help mitigate the negative feedback between the financial sector and the real economy. Such improvement is crucial because we will not have a meaningful recovery without a stabilization of our financial system and credit markets.

The Federal Reserve has played an active role over the past 18 months in the development and implementation of policies to counter the financial crisis and its economic fallout. Steps taken have included lowering interest rates, making backup sources of liquidity available to private lenders, and using the Federal Reserve's lending capacity to try to revive a variety of financial markets. The easing of monetary policy, as conventionally defined by the target for the federal funds rate, has been very aggressive; by the end of last year, the Federal Open Market Committee (FOMC) had brought the target federal funds rate down essentially to zero. Moreover, the FOMC noted, in the statement after its March meeting, "that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period." By communicating this expectation, the Committee reinforced market beliefs that interest rate policy is likely to remain on hold, thereby putting downward pressure on longer-term rates, which have the largest effects on spending.

In addition, the Federal Reserve has taken other policy steps to ease credit conditions and support the broader economy. Throughout the crisis, the Federal Reserve has moved to ensure that U.S. depository institutions can obtain the liquidity that they require. Given the global nature of financial markets and institutions, the Federal Reserve also established swap lines with foreign central banks, allowing them to obtain dollars so that they could meet the dollar liquidity needs of banks in their jurisdictions. As some large investment banks came increasingly under pressure in early 2008, the Federal Reserve, consistent with its role as lender of last resort and in light of the key roles these institutions play in a range of financial markets, introduced programs under which it could provide liquidity to primary dealers. And, as the financial situation deteriorated last fall, the Federal Reserve established liquidity facilities for money market mutual funds and introduced programs to provide liquidity directly to borrowers and investors in key credit markets, including the commercial paper market, where strains threatened the ability of many financial and nonfinancial firms to place their paper. The Federal Reserve and the Treasury have worked together to try to restart the asset-backed securities markets, where loans are packaged for sale to final investors. And just recently, the Federal Reserve started making substantial purchases of longer-term Treasury and mortgage-related securities to support market functioning and reduce long-term interest rates in the mortgage and other private credit markets.

Along with its monetary policy actions, the Federal Reserve has been part of a broader government effort--one that includes the Treasury and the Federal Deposit Insurance Corporation (FDIC)--to provide more direct support to financial firms and the economy. In part, this effort has involved targeted actions to prevent the failure or substantial weakening of specific systemically important institutions when the disorderly failure of a large, complex, interconnected firm would disrupt the functioning of a range of financial markets and impede the flow of credit to households and businesses. Besides this targeted support, the government has been injecting capital into the banking system to ensure that U.S. banking institutions are well capitalized and can support the recovery by lending to sound households and businesses. In addition to the programs to provide capital, the government, through the FDIC, has temporarily guaranteed selected liabilities of insured depository institutions and their holding companies, thereby improving their access to funding. The government has also taken steps, most recently through the Making Home Affordable program, to reduce unnecessary foreclosures. Beyond helping homeowners stay in their houses, limiting foreclosures should benefit lenders, mitigate adverse impacts on affected communities, and, by limiting the decline in overall home prices, help support the broader economy. Finally, the Treasury recently announced a program to assist banks and other lenders in finding markets for their "legacy assets"--that is, real estate-related assets that were accumulated during the housing boom and have since declined in value and become relatively illiquid. Uncertainty about the value of legacy assets is weighing on confidence in banks, and so helping banks to dispose of such assets should contribute to their ability to raise capital and increase lending.

Employing its fiscal policy tools, the government has enacted a multifaceted program of stimulus that will provide direct support to spending and economic activity. In February, the President signed into law a $787 billion package that included cuts in taxes and increases in transfer payments for households, lower taxes for businesses, higher spending for infrastructure investments, and additional financial assistance to state and local governments, many of which would otherwise have been forced to cut spending in response to declining revenues. Although the exact effects of these measures on the economy are difficult to gauge, they will likely provide a significant boost to activity. According to the Congressional Budget Office, the effect of the stimulus package on the level of real GDP at the end of 2010 could range from about 1 percent to more than 3 percent, relative to a baseline forecast that does not include the stimulus. That additional GDP translates into an unemployment rate by the end of next year that is between 1/2 and 2 percentage points lower than it otherwise would be. With the tax cuts already showing up in paychecks, increases in transfer payments already in place, and grants to states and localities starting to flow, the effects of the package on aggregate demand should start to provide some support to activity fairly quickly.

Thus a broad range of policies are in place to foster recovery. But economic recoveries are also typically shaped by powerful internal cyclical dynamics. Indeed, it appears that some of the forces that had been holding down growth are starting to abate. In particular, the recent data suggest that the multiyear contraction in home sales and new construction may be nearing an end. House prices could well continue to fall for a while, and months' supply of unsold homes will likely remain elevated for some time. At some point, however, house prices will begin to flatten out, and fears about buying into a falling market will start to wane. At the same time, the improved affordability of homeownership resulting from reduced house prices, low mortgage interest rates, and government programs (including incentives for first-time homebuyers) should boost demand. Because inventories of unsold homes are still very high relative to sales, it may take a while for any pickup in demand to translate into higher production. But even stabilization in residential construction would remove what has been a significant drag on the U.S. economy.

Addressing inventory overhangs of goods other than houses is another important part of the adjustment process. In a number of industries, inventory-sales ratios soared late last year, and they remain elevated despite substantial reductions in manufacturing output and a marked quickening in the rate of inventory liquidation. Businesses still have a ways to go to bring inventories into alignment with sales. But as these excesses are worked off, production will begin rising back up to the level of sales, thereby providing a boost to GDP growth.

Another factor at work is the sharp fall in prices of oil and other commodities since the middle of 2008. This decline in prices--which partly reflected the worldwide drop in demand--has helped bolster real incomes and consumer spending in the United States.

More broadly, we are in the midst of an adjustment to the negative shocks that have hit the economy over the past two years and that intensified last fall. In particular, late last year we experienced a marked deterioration in a broad range of financial markets, severe cutbacks in spending in response to the tighter financial conditions, and a sudden and substantial erosion of confidence among households and businesses that greatly steepened the ongoing recession. In response to the effect of these shocks, businesses have instituted sharp reductions in production, ratcheted down capital spending plans, and laid off workers. At the same time, households have scaled back spending in response to lower wealth, diminished access to credit, and the deterioration in their prospects for employment and income. Financial markets have improved some since last fall, though they remain disrupted and fragile. Over time, as businesses and households gradually adjust to these adverse shocks, the drag on activity will abate, and the stage will be set for recovery and a resumption of growth.

How Strong Will the Recovery Be?

The historical record provides a natural starting point for gauging the likely strength of the coming recovery. According to the research literature, the recessions that occurred between the end of World War II and the 1980s were typically followed by high-growth recovery phases that relatively quickly pushed output back up to its pre-recession level, and policy--sometimes fiscal but especially monetary policy--contributed significantly to those bouncebacks. All else being equal, that historical pattern would point to a strong recovery in this episode.

However, the last two business cycles cast some doubt on that conclusion. The recovery that followed the recession in the early 1990s was fairly sluggish. And with a lackluster recovery after the 2001 recession, the evidence supporting rapid bouncebacks after downturns was weakened further. Some analysts have suggested that those slow recoveries reflected the shallowness of the downturns--indeed, the research on the pre-1990 episodes indicated that the strength of recoveries was correlated with the depth of the preceding recessions, and the slowness of the recoveries from the 1990 and 2001 recessions would be consistent with that correlation.[3] However, many commentators instead attributed the slowness of those recoveries to the drag from structural factors--namely, the financial headwinds in the early 1990s and the need to work off capital overhangs after 2001. All in all, the historical record leaves us with at least two possibilities for the coming recovery: a strong recovery from the deep recession or a sluggish recovery because drag from the underlying structural factors partly offsets the usual forces that generate a rapid bounceback.

In the current episode, the imbalances preceding this contraction were substantial, and we are still dealing with the consequences of the developments that precipitated the downturn. Accordingly, my best guess is that we are in for a relatively gradual recovery, though a very wide range of uncertainty surrounds that outlook.

In the financial markets, we are in the midst of a massive restructuring of credit flows and adjustment of risk premiums. After the recent experience, there is likely to be less reliance on securitization markets to intermediate credit flows and more reliance on banks and other intermediaries. But those intermediaries are still rebuilding the capital and liquidity positions they need to substantially increase their participation in credit markets.

As I noted, we have taken important policy steps to support financial institutions and markets and to restart the flow of credit. Indeed, risk spreads in both short-term and long-term markets have narrowed since late last year, and equity prices, after a sharp decline earlier this year, have rebounded substantially in recent weeks. However, financial markets continue to be fragile, many risk spreads are still elevated, and investors appear to remain uncertain about the strength of some financial institutions. Some of the government programs I have discussed--those to restart markets, provide additional capital buffers, and open outlets for legacy assets--are just now being implemented. While these programs are promising, we will not be able to judge their success for a time. Thus, I suspect that credit conditions will ease only slowly and will continue to exert restraint on spending for a time.

The sharp drop in consumer spending since the middle of last year has been reflected in a noticeable upturn in the personal saving rate, which now stands above 4 percent after fluctuating between 0 and 1percent for most of the period since 2005. I would not be surprised to see the saving rate rise somewhat further in coming quarters as the lagged effects of the steep declines in home values and equity prices over the past couple of years restrain spending relative to income. In addition, shoring up personal financial positions may trump a rebound in spending for a time--especially if unemployment continues to rise, as it did in the initial phase of the past two recoveries. Confidence about future economic prospects will be a critical influence on people's willingness to spend. Confidence took a major hit last fall, and my best guess is that it will recover slowly along with the financial markets and the economy. But once financial conditions stabilize, the economy regains its footing, and households sense that better prospects lie ahead, confidence could rebound more vigorously, leading to a more rapid pickup in purchases at that point.

Business fixed investment has also fallen sharply since last fall, and it is likely to remain weak through the remainder of 2009. Indeed, businesses will probably be reluctant to undertake new projects in the absence of a substantial improvement in the outlook for sales and profitability and a lifting of uncertainty. And tight credit conditions--especially for commercial construction--likely will be a significant negative force. But here too, confidence could bounce back more rapidly, and if credit conditions were to ease appreciably, businesses might move ahead quickly with capital spending projects that had been postponed during the recession.

Exports were an important source of strength for the U.S. economy in recent years. However, the global nature of the current economic downturn means that they are unlikely to provide much support for domestic production going forward. Activity in foreign economies, taken together, contracted in the fourth quarter at a rapid pace--similar to that in the United States. Recent indicators point to equally dismal outcomes in the first quarter and, although there have been a few signs of stabilization, have yet to send a clear signal that the global economy has hit bottom. The intensification of financial turmoil was global, and many of our trading partners are also facing constraints on credit availability.

Although the recovery in the U.S. economy is likely to be gradual in its early stages, it should gain momentum over time. As credit markets improve, the accommodative stance of monetary policy will show through more clearly. And a rebound in confidence about the future should help spur demand. As demand strengthens and financial markets improve, some of the adverse feedbacks should reverse and begin working to bolster activity. In time, as these forces come into play, economic growth will pick up, ultimately returning the economy to its full productive capacity and bringing the unemployment rate down to a more normal level.

▸ **Inflation Prospects**

If, as I have described, the economic recovery initially follows a relatively gradual track, margins of slack in labor and product markets are likely to remain wide for a time, implying some further downward pressure on inflation. The extent of a decline in inflation, however, should be limited by the relative stability of longer-term inflation expectations. That said, there are sizable risks on both sides of the inflation forecast.

On the one hand, we cannot rule out the possibility that adverse economic conditions will cause deeper cuts in prices, a greater softening in wages, and a steep decline in inflation expectations. Substantial declines in inflation would raise real interest rates, thereby restraining the recovery even more. Moreover, the risk that inflation could be lower will be exacerbated to the extent that economic activity falls short of the path that I have described. In these circumstances, the Federal Reserve would continue to look for ways to relieve financial pressures and encourage spending.

On the other hand, the Federal Reserve's actions to ease credit conditions have resulted in a tremendous increase in its assets and in bank reserves. Some observers have expressed concern that these actions, if not reversed in a timely manner, are sowing the seeds of a sharp pickup in inflation down the road. As I just noted, near-term prospects appear to be for a decline in inflation rather than an increase. But my colleagues and I are acutely aware of the risk of higher inflation as the economic recovery gains speed. We are firmly committed to acting in a way that preserves price stability, and we believe we have the tools to absorb reserves and raise interest rates when needed. Moreover, we are working with the Treasury to introduce legislation that would enlarge our tool kit for moving away from the extraordinary degree of financial stimulus we have put in place when the time arrives.

To sum up, the uncertainty around the economic outlook is substantial. The path of the economy will depend critically on how quickly the current stresses in financial markets abate; these events have few if any precedents, and thus it is very difficult to predict how the adjustment process will play out. But at the end of the process, our financial system will be on firmer footing. Both markets and regulators will continue to press financial firms to employ less leverage and have more reliable sources of liquidity, and those firms will have every incentive to more effectively price, monitor, and manage risk. Improvements to the supervisory and regulatory framework will help create a more stable financial system. In addition, we will have a stronger economy. Businesses will have boosted the efficiency of their operations. And households will be less indebted and saving more. That greater saving will, all else being equal, support greater investment or allow domestic saving to displace foreign saving for a more sustainable international position. The U.S. economy has proven itself over the years to be flexible and resilient as well as innovative and productive, qualities that enable it to rebound from serious economic shocks, and I am confident that, in a like manner, we will rebound from our current economic and financial challenges. ◆

Saving Money, Saving Lives

MAKING HEALTH CARE WORK FOR AMERICAN FAMILIES

Testimony of JOHN C. GOODMAN, Ph.D., President, CEO and Kellye Wright Fellow, National Center for Policy Analysis

Delivered to the Energy & Commerce Subcommittee on Health, United States House of Representatives, Washington, D.C., April 2, 2009

Mr. Chairman and members of the Subcommittee, I offer these comments for your consideration as you debate options for increasing the quality of health care and lowering the cost. I represent the National Center for Policy Analysis, a nonprofit, nonpartisan public policy research organization dedicated to developing and promoting private alternatives to government regulation and control, solving problems by relying on the strength of the competitive, entrepreneurial private sector.

To confront America's health care crisis, we do not need more spending, more regulations or more bureaucracy. We do need people, however, including every doctor and every patient. Every American must be free to use their intelligence, their creativity and their innovative ability to make the changes needed to create access to low-cost, high-quality health care.

▸ I. Free the Doctor

Doctors today are forced to practice medicine under an outmoded, wasteful payment system designed for a different century. They should instead be given access to payment systems available to other professionals.

Problem: Typically, doctors receive no financial reward for talking to patients by telephone, communicating by e-mail, teaching patients how to manage their own care or helping them be better consumers in the market for drugs. In fact, doctors who help patients in these ways will end up with less take-home pay. To make matters worse, as third-party payers suppress reimbursement fees, doctors are increasingly unable to perform any task that is not reimbursed.

Solution: Let Doctors Be Doctors. In Medicare and Medicaid, it should be as easy as possible for providers to get paid in better ways. We should be willing to reward doctors who raise quality and lower costs — including improving patient access to care, improving communication and teaching patients how to be better managers of their own care. What is needed is not pay-for-performance, but performance for pay — with ideas and proposals coming from the supply side of the market (which is more knowledgeable about potential improvements than the demand side).

Any doctor should be able to propose and obtain a different reimbursement arrangement, provided that (1) the total cost to government does not increase, (2) patient quality of care does not decrease and (3) the doctor proposes a method of measuring and assuring that (1) and (2) have been satisfied.

In the Handbook on State Health Care Reform, for example, the NCPA proposed a radically different way to pay for chronic care, with the state paying a flat monthly fee to cover "fixed costs" (e.g., coordination of care, maintenance of electronic medical records) and patients paying, say, from Health Savings Accounts, for the "variable costs," including paying doctors for their time (e.g., face-to-face, e-mail and telephone consultations). Practitioners will no doubt think of many variations and improvements on this idea.

Problem: All too often providers face perverse incentives. When they make changes that raise quality and lower costs, their income goes down, not up.

Example: Geisinger Health System in central Pennsylvania gives heart patients a "warranty" on their surgeries. Patients who have to be readmitted because of complications pay nothing for the second admission. Yet in providing higher quality and lowering patient costs, Geisinger loses money. That's why other hospitals do not follow its example.

Example: Studies show that if every patient went to the Mayo Clinic for health care, we could lower the national health care bill by one-fourth — and quality would improve. If everyone went for care to the Intermountain Hospital System in Salt Lake City, we could lower our health care costs by one-third — while improving quality. Why don't other hospitals copy these exemplars of low-cost, high-quality care? Because they would be severely penalized financially under the current system.

Solution: Let Hospitals Be Hospitals. Facilities that figure out how to lower patient costs, raise quality and offer warranties and other guaranties should be rewarded for doing so — just as they would in any other market. Accordingly, the same three reimbursement rules proposed for doctors above should also apply to hospitals.

Problem: Entrepreneurs are creating new products to meet needs not being met by traditional health insurance. For example, people can pay with their own money for telephone and e-mail consultations. They can purchase blood tests via the Internet and get results in 24 hours. They can get low-cost care with very little waiting at walk-in clinics in shopping malls. Yet all too often these services are hampered by outmoded, unnecessary government regulations. Amazingly, doctors are prohibited from owning and operating walk-in clinics that refer patients to their regular practices!

Solution: Let Entrepreneurs Be Entrepreneurs. We should welcome and encourage new ways of meeting patient needs, rather than stifle these efforts with unnecessary, outmoded laws and regulations. As with providers and facilities, promising innovations should be expedited and approved quickly. For example, walk-in clinics that charge half as much and match the quality of traditional care, with electronic medical records and electronic prescriptions to boot, should be approved outright.

▸ II. Free the Patient

Patients also suffer when payments to doctors and hospitals are based on outmoded formulas. Whereas suppliers compete to meet customer needs in almost every other market, this happens all too rarely in health care.

Problem: Many patients have difficulty seeing primary care physicians. All too often they turn to hospital emergency rooms where there may be long waits and where the cost of care is much higher. When they do see doctors, all too often patients get inadequate information. The problem is made worse by the inability to communicate by telephone or e-mail.

Solution: Patient Power. We need to explore new ways to empower patients — especially the chronically ill, allowing them to manage more of their own care and more of their own health care dollars. Also, patients should be able to purchase services that are not paid for by traditional health insurance, including telephone and e-mail consultations and patient education services.

Example: Studies show that diabetics, asthmatics and other chronic patients can manage their own care as well as or better than conventional physician care and at lower costs. Yet to do this patients need training, easier access to information and the ability to purchase and use in-house monitors.

Example: More than half the states have "Cash and Counsel" programs for homebound, disabled Medicaid patients — allowing them to manage their own health care dollars and hire and fire the people who provide them services, instead of having these decisions made by an impersonal bureaucracy. Patient satisfaction in these programs is almost 100 percent.

▸ III. Free the Employees

Our health insurance system evolved at a time when many workers expected to work for the same employer for their entire work lives. Clearly, that assumption is no longer valid.

Problem: When employees switch jobs, they are usually forced to switch insurance plans. This often means a switch of doctors, which means no continuity of care. Also, their new insurance may not have the same benefits as the original. To make matters worse, many employees are trapped in jobs they cannot leave because they cannot afford to lose their health insurance.

Solution: Personal and Portable Health Insurance. We should move to a system in which employees can take their health insurance with them when they travel from job to job. Transition to a new system may take many years. A good place to start is with baby boomers who retire early.

Problem: People who do not get health insurance from an employer must pay for it with after-tax dollars, making insurance as much as 50 percent more expensive.

Solution: Tax Fairness. People who obtain health insurance should enjoy the same tax relief, regardless of how the insurance is purchased.

▸ IV. Free the Employer

Employers are also trapped in a system designed for a different age.

Problem: In ways that are sometimes subtle and sometimes not so subtle, too many employers are trying to avoid hiring employees (and employee dependents) with high health care costs, much like a game of musical chairs.

Problem: By default, employers have been put in the position of having to manage their employees' health care costs — an activity for which most have no experience or expertise. While some large employers do an adequate job, small employers are incapable of doing it well.

Solution: Personal and Portable Insurance. Portable insurance would be a boon to employers as well as employees. Employers could make a defined contribution to each employee's health insurance; yet the insurance would be owned by the employees and travel with them on their journey through the labor market. In an ideal world, employers should be able to hire employees based solely on their ability to produce, irrespective of expected medical costs.

Example: The United Mine Workers, NFL football players and many other workers have better arrangements. Although employers pay all or most of the health insurance premiums, the health plan is largely independent of any particular employer and coverage is fully portable — traveling with employees whenever they switch jobs.

▸ V. Free the Nontraditional Workplace

Most of our labor law, tax law and employee benefits law was enacted years ago and was based on the assumption that employees would be full-time workers, typically with a homemaker telecommuting. Today, one-third of the workforce consists of part-time workers and independent contractors. Many are telecommuting from their own homes. These changes are partly the result of the most important economic and sociological change of the past half-century: the movement of women into the labor market.

Problem: Two-earner couples are common in the labor market. They need employee benefits,

including health insurance, but they don't need duplicate benefits. An employee covered by a spouse's health plan should be able to choose higher wages rather than an unnecessary second health plan. Yet today employers cannot give her that option.

Problem: Many part-time employees face the opposite problem. They would willingly take less

pay if they could be enrolled in their employer's health plan. Yet employers generally are not allowed to give employees this option either.

Solution: Flexible Employee Benefits. Public policy should be on the side of helping people meet their needs rather than creating bureaucratic obstacles. Employers and employees should be free to adjust their employee benefit policies to meet the needs of a changing workplace.

▸ VI. Free the Insurer

Like doctors, patients, employees and employers, insurance companies are also trapped in a dysfunctional system.

Problem: All too often insurers operate under regulations that encourage them to avoid the sick and attract the healthy. Even worse, they may face incentives to under-provide care to the sick and over-provide to the healthy. These perverse incentives are as bad for the insurers as they are for the patients.

Solution: A Market for the Care of Sick People. We need to encourage insurance markets in which health plans specialize in various conditions — especially chronic illness. Plans should compete to see who can better solve the needs of the people with the most severe health problems.

Example: In the Medicare Advantage program the federal government uses a highly sophisticated payment system that pays higher premiums for sicker, costlier enrollees. As a result, patients with health problems are just as attractive as healthy people to insurers. In fact, some health plans specialize in insurance for people with multiple health problems.

▸ VII. Free the Uninsured

One reason why there are so many uninsured in America is that we encourage people to be uninsured.

Problem: Most uninsured people do not have the opportunity to obtain tax-subsidized employer-provided health insurance. As a result, if they buy insurance on their own they must do so with aftertax dollars. In this way, the tax law discourages private insurance.

Problem: If the uninsured need medical care and can't pay their bills, they receive free care — an amount equal to about $1,500 per uninsured person per year — or $6,000 for a family of four. Since these funds can generally not be used to purchase private insurance, free care programs around the country encourage people to be uninsured.

Solution: Insure the Uninsured. We can use money already in the system to give people who would otherwise rely on the free care safety net a tax subsidy to purchase private health insurance instead.

▸ VIII. Free the Kids

Many in Congress want to push children into a State Children's Health Insurance Plan (S-CHIP), paid for by taxpayers. Both the children and the taxpayers would be better off if kids were enrolled in their parent's private health insurance plans instead.

Problem: Studies show that every time government spends an extra $1 on S-CHIP, private insurance contracts by 60 cents. Either families drop their private insurance in order to take advantage of free government-provided health insurance or employers drop coverage and pay higher cash wages instead — knowing that free health insurance is an option for their employees. Because of a very high crowd-out rate, S-CHIP expansion is very costly to taxpayers and produces small social benefits. To make matters worse, children are leaving private plans where they have access to a broad array of doctors and facilities to enroll in public plans where their access is often no better than the access of the uninsured or Medicaid enrollees.

Solution: Private Insurance for Children. Instead of encouraging people to drop private coverage for a public plan, we should reverse the incentives: use S-CHIP money to encourage parents to enroll their children in their employer's plan or another plan of the parents' choosing.

▸ IX. Free the Parents

Under the current system, a child could be enrolled in S-CHIP, a mother could be enrolled in

Medicaid and a father could be enrolled in an employer's plan. Medical outcomes are likely to be better for all three if they are in the same health plan.

Problem: As in the case of S-CHIP, Medicaid has a very high crowd-out rate. Public dollars substitute for private dollars. And access to care inevitably diminishes when people make the transition.

Solution: Private Insurance for Low-Income Families. If we truly want universal access to health care, low-and moderate-income families must be able to see the same doctors and enter the same facilities as other citizens. That will never happen unless they participate in the same health insurance plans as other citizens. Instead of cordoning people off in a plan that underpays providers and rations care by waiting, we should use Medicaid and S-CHIP funds to subsidize private health insurance for all who want it.

▸ X. Free the Grandparents

More than 40 years ago our country decided to segregate seniors into a separate health insurance system called Medicare. In the beginning Medicare copied the standard Blue Cross plan of the day. With the passage of time, however, Medicare lagged behind the improvements in other insurance products.

Problem: The basic Medicare package (Parts A & B) is distinctly inferior to the kind of insurance most other Americans have. (It is even inferior to coverage for poor families under Medicaid.) For example, seniors are exposed to far more out-of-pocket risk and they do not have coverage for preventive care. Shockingly, the basic Medicare package will pay for the amputation of diabetic's leg, but it will not pay for drugs that would have made the amputation unnecessary.

Problem: To fill the gaps in their basic coverage, most seniors obtain Medigap coverage — which means that must pay two premiums to two plans. Even then, seniors usually do not have the coverage for drugs that most nonseniors have. So they must pay a third premium to a third plan (Medicare Part D) to get the same total coverage other people obtain by paying a single premium to a single plan. Paying three premiums to three plans is wasteful. Studies show that if the first two premiums were paid to a single, comprehensive health plan, the third premium seniors are paying would be unnecessary.

Problem: Even with comprehensive coverage, Medicare is still the least modern of all the health insurance plans. Medicare is the least likely to pay for telephone or e-mail consultations or for health care services obtained outside of the country. It also refuses to pay for convenient care in walk-in clinics in drugstores and shopping malls, although even Medicaid is beginning to pay for these services for low-income families in some states.

Example: The Medicare Advantage program has been a highly successful innovation. For only a modest premium (in addition to the Part B premium) and in some cases for no additional premium, seniors are able to enroll in comprehensive health plans similar to the health insurance most nonseniors have. Compared to traditional Medicare, these seniors get about $825 of additional benefits per year.

Solution: Access to the Full Insurance Marketplace. Seniors who are happy with their current arrangement should be allowed to stay there. But millions of seniors could have more care and better care for less money if we expanded the range of options. Other citizens have access to PPO plans, Health Savings Account plans and other hybrids. Seniors need these same options as well.

Thank you for considering these comments. ◆

The Digital Revolution Comes to Marketing

IDENTIFYING CONSUMER ECOSYSTEMS

Address by MICHAEL MENDENHALL, Senior Vice President and Chief Marketing Officer, Hewlett-Packard Company

Delivered to the American Association of Advertising Agencies, New Orleans, Louisiana, March 4, 2009

Good morning.

I've had the good fortune to speak at a couple of marketing industry events over the past six months – before the Association of National Advertisers last October and, more recently, at a meeting of the Interactive Advertising Bureau.

What I've been talking about at these events is how the Internet and the explosion of digital content are changing marketing as we've known and understood it. I'll continue on that theme today, but in a way that addresses what I know is top of mind for all of us — namely, the recession.

Just last month, I was at the World Economic Forum. As you can imagine, it was a sober gathering this year. World leaders are under enormous pressure to refuel capital markets and start creating jobs. Business leaders are under equal pressure to get their companies competitive and lean enough to survive the downturn.

At HP, we're very focused on keeping our cost structure as efficient and variable as possible, so that we can continue executing our core strategy in R&D, sales and service, and investing for growth. Our goal is to emerge from the downturn in a stronger competitive position than we entered it. Last quarter, in a rapidly deteriorating marketplace, revenue was down in some product businesses across industries and regions.

At HP, we executed well, meeting our non-GAAP earnings guidance and growing non-GAAP operating profit by 10%. In a tough environment, we were able to take advantage of our position as an industry leader to capture share in many of our key segments, including in the consumer and enterprise markets. Across the economy, all businesses are trying to maintain their strategic focus in the face of declining revenues.

As we all know, the economy is losing jobs every day. Those who have jobs are spending less, accelerating the recession and the loss of yet more jobs. Let's take a look a little closer to home.

According to BrandRepublic, in 2008, the U.S. media and advertising sectors shed more than 65,000 jobs. The newspaper industry lost 1 in 10 workers.

Just last week, The Philadelphia Inquirer declared bankruptcy. The Rocky Mountain News has announced that it's closing its doors and rumors are swirling about the survival of The San Francisco Chronicle.

Traditional media is under siege and, as marketers, we face difficult decisions about where to allocate our dollars. A recent Forrester report indicates that about 40% of global CMOs surveyed believe their budgets will be reduced. Branding and advertising are at the top of their lists. Yet, history shows that companies that strengthen their brands during a recession emerge stronger.

Looking back, in response to the major recession of 1975, Ford scaled back ad spending by 14%. Chevy, took a different road and increased its spend, grabbing 2% of market share in the process. It took Ford 5 years to recover.

Today, the U.S. auto industry is at the center of the storm. Their problems are about a lot more than ad outlays, they're about survival. With blood in the water, Hyundai is going in for the kill. Hyundai has launched a massive new campaign and promotion that aligns them with the mindset of the average consumer.

If you buy a new Hyundai and lose your job, they'll cover payments for three months. If necessary, within the first year, they'll take the car back without any negative impact to your credit. The program has paid off. U.S. auto sales in January were at the weakest in 27 years, but Hyundai saw demand rise 14%.

Let's take a broader look at marketing in a difficult economy. McGraw-Hill analyzed 468 companies during the 1974 recession and 600 companies during the '81-'82 recession. Firms that increased or maintained their ad expenditures averaged significantly higher sales growth, both during the recession and for the following 3-5 years. You cannot abandon brand efforts without adverse impact, but we all know the reality. The fact is budgets are under enormous pressure.

So what are we supposed to do? Right now it feels like everything is in decline, but there is a force that is continuing to grow in popularity, influence, and reach; namely, digital media. At no time has the vital role digital media can play in driving efficiencies and engaging customers been more relevant.

Let me provide a little context. We are now fully immersed in the information economy. High-speed, broadband connectivity has combined the forces of globalization and the power of human creativity on a massive scale. The amount of information in the world is predicted to double in the next five years.

The amount of digitized information doubles every 18 months. The growth potential is phenomenal and, for many, overwhelming. By 2010, the total amount of digital information will be about 988 exabytes, about 18 million times the information in all the books ever written.

All of that information is useless if it can't be acted on; if you can't get the right information to the right person at the right time. All that data has to be processed, analyzed, managed, shared, viewed, stored and secured. We believe that return on information will become one of the most important drivers of business success. From a technology standpoint, this creates an unprecedented disruption in the marketplace as users are forced to reexamine their relationship to information technology. The same is true for all of us as marketers.

The digital world presents the opportunity to efficiently reach audiences in the ways most relevant to them and at unprecedented speeds. I shared some forecasts of marketing budgets. Interestingly, according to eMarketer, online ad spending is predicted to grow by about 9% this year. Some believe that ad agencies will move more quickly to integrate digital media into their portfolios.

You tell me. I think it's where the money's going. The reason is fairly simple. It's where the engaged audience is going.

Web 2.0 has brought on a paradigm shift in the way people communicate, collaborate and engage. Ideas, opinions and, in fact, attention are no longer the proprietary assets of a few powerful, centralized organizations. This presents enormous challenges. How do we, for example, integrate social media into our brands? How do we join the conversation in a natural and authentic way? Does the 30-second TV spot or multi-million dollar Super Bowl ad still make sense as the centerpiece of a campaign? The paradigm is no longer based on interruption — grabbing attention for your product — but on a more nuanced approach of engagement.

At HP, innovation is the lifeblood of our business. We apply that principle just as rigorously to marketing as we do to managing our supply chain and developing the latest mini-notebook PC. We are in the process of revamping our brand and incorporating a digital strategy in every aspect of our marketing and communications. The recession has given these efforts an even greater sense of urgency and relevance. Let me tell you about the work we have underway. In some of our recent printer campaigns, digital is paving the way to a higher return on investment. Our banner ads are five times more effective than they were one year ago. By being more efficient in our approach to search ads, we've decreased their cost by 50%, while increasing the click-through rate and conversion to offline purchases by six times.

Banner and search are just a couple pieces of a much larger digital landscape. HP where we are engaging in a conversation with our customers about PC design.

We are, in fact, letting them design their own. Hisako Sakihama, a 27-year-old designer from Japan, was the winner of a worldwide competition to design the next HP notebook PC. This year, artists from 94 countries submitted nearly 17,000 designs. More than 62,000 votes were received from 159 countries.

By opening up our doors, just a little, we're accessing the long-tail of the Internet and harnessing the talent of our customers in a natural way. Similarly, we've launched user-generated online support forums.

We are also tapping the collective intelligence of our customers by hosting forums where they can help each other. This has been enormously successful.

In the month of January alone, we had more than five million page views, more than 10,000 posts, and about 400,000 searches. As we ride out the recession, forums that allow us to tap customer insight in a more cost-efficient manor will be critical to our success.

Yet another HP program in the digital space involves working with MySpace to help unlock content from the digital world. We've embedded an HP print button on MySpace pages, where a 125 million users store and display more than four billion images. Our technology enables these images to be easily printed and shared. That's a lot of brand impressions on one of our most important demographics: young, tech-savvy consumers.

And talk about cost-effective marketing. We're not just paying for a banner ad, this is a revenue opportunity. We're connecting these users directly to the benefits and functionality of HP's printing business in a highly personalized way. People can share their photos and tell their stories in whatever medium they like. We're pushing that idea further through a cloud service called MagCloud.

With HP's MagCloud, we're democratizing print publishing. The service allows anyone to publish a professional-quality magazine and print, promote, sell and deliver it, on demand. We custom print each issue when it's ordered. That means no large press runs, no pre-prepublication costs, no waste. It has now become economically viable – and more environmentally sustainable – to produce a magazine for 1,000 or 100, or even 1. Publishers can sell ad space to drive down the cost per issue and generate more money. And there's a long-tail effect here. With thousands of magazines in any given niche, advertisers can access a significant, highly targeted audience very affordably.

At the World Economic Forum last month, CNBC used MagCloud to create a magazine covering the conference. It was conceived, produced, printed, and distributed before the conference concluded. These are just a few highlights of the work we have underway. Directionally, we are confident that engaging customers through digital media is the way things are heading. But we also think it's just the tip of the iceberg.

In the midst of this paradigm shift, many have dismissed traditional media wholesale, going so far as to predict the death of publishing houses, networks, studios, and media conglomerates. The truth is that traditional outlets will have to adapt, but will not disappear. I believe one solution to the challenge we face in harnessing the power of digital media can be found at the heart of traditional media - network syndicated television.

The operating model that catapulted network television to its perch as the most powerful medium featured the Big Three — ABC, CBS and NBC — and a web of independently owned and operated local affiliates. The affiliates entered into contracts with the networks for content and advertising, and produced some local content and advertising as well. As a marketer, you would place spots nationally, locally or in some combination, depending on the scope and scale of the campaign. This allowed some degree of customization, but is more or less mass content delivered to a mass audience.

However, if we apply the network model to the Internet, we can effectively fine tune and deliver messages to very specific audiences in a very cost-effective way. In the digital world, we can go one step further. We can create our own networks. In this approach, web sites represent the affiliates, with an infinitely greater ability to target audiences by areas of interest and demographics. Brands have the opportunity to be the Big Three. By contracting with a vast number of individual web sites, a brand would be able to embed content, links to social forums, and advertising seamlessly into a dynamic conversation that is already taking place.

The problem is, with hundreds of millions of individual web sites, the amount of time and research involved to build an array of brand-specific, niche networks is prohibitive. Web sites come and go every day. Traffic patterns change by the minute. The winners will be the agencies that can rationalize the Internet, aggregate these kinds of networks and offer them as a turnkey service. And the companies that move quickly to establish their brands as a fully integrated feature of the digital landscape.

Nabbr, the GenY online video network, is an example of a company that enables brands to enter the conversation fluidly. Its network of independent web sites opens the door to more than 39 million Gen Y social media users.

One of the sites in their network, Whateverlife.com, is run by a young woman named Ashley Qualls. She began by designing a really cool MySpace page.

Then she showed her friends how do it. She started posting her design templates on her page for anyone to use. A few visitors came knocking. According to Quantcast, it's actually more than 1.2 million visitors a month– more than CosmoGirl! and Teen Vogue combined.

That amount of traffic caught some people's attention. Nabbr added Ashley as an affiliate in their network, incorporating ads from their clients on Whateverlife.com and sharing the revenue. Ashley is only 18 years-old, yet she's already made her first million. She and her mother live in a house that Ashley bought. Nabbr has 350 Ashleys in its network. According to a recent Forrester study, Gen Y is spending 30% more time online than watching TV.

Which network would you use to engage them?

Agencies and start-ups are beginning to offer services that allow major brands to create their own networks. One of HP's customers, Nike, is running circles around the competition. Nike has tapped into these types of services and is turning the digital media challenge into an opportunity through sites like NIKEiD and Nike+. Nike has been able to engage a very active, very large online running community, hosting social media that allows enthusiasts to share tips, post times and distances, and even compete. By building its own network, Nike has become a destination in the virtual world for its most important customers.

At a time when marketing budgets are under enormous pressure, companies can turn to the digital world to recession-proof their brands through networks they own and control. For many companies, brand-specific digital networks will be just one piece of a larger marketing, communications, sales and support mix that needs to be rethought in light of the information explosion. Today, we have to ask ourselves what's the definition of a journalist, a publisher, and even a network? And, more importantly, how we do access, influence and engage in this constantly changing environment. As I've said before, brands are not defined by campaigns any more, but by the consumer ecosystems we nurture to support them.

Thank you very much. ◆

Change Can Be Good

DON'T BE SCARED TO DO SOMETHING DIFFERENT

Address by JACK MA, Chairman and CEO, Alibaba Group

Delivered to the Asia Society in New York, New York, March 12, 2009

Fifteen years ago, I visited Seattle. It was my first trip to the States and it was there that I touched a computer keyboard for the first time in my life. It was also the first time in my life that I connected to the Internet. It prompted my decision to leave my job as a teacher and set up a company called Chinapages.com, which was the first Internet company in China. I described myself at that time as "a blind man riding on the back of a blind tiger." Without knowing anything about technology or computers, we started our first company and after four years of terrible experience, we failed.

Ten years ago, I returned to Silicon Valley again with my CFO Joseph Tsai, who is also here today. We went to Silicon Valley with the dreams that we had for Alibaba. We wanted to help SMEs (small and medium enterprises) in China and around the world do business online. We believe the Internet was a great place for business and called our marketplace Alibaba because we wanted to 'Open Sesame' for SMEs. We went there looking for venture capital but was rejected by all the venture capitalists because they did not see the potential for e-commerce in China. They all thought, "How can you do e-commerce in China? How can you do business on the Internet in China? What are you talking about with the B2B, B2C, etc? It is too early for China."

However, we were not disappointed by the experience. We were instead inspired by the entrepreneurial spirit in Silicon Valley and the American Dream. I remember every evening as I walked along the streets, I saw the road between Silicon Valley and San Francisco was alive with traffic. And every evening the office buildings' lights burned deep into the night, with people working around the clock. And on Saturdays and Sundays, I couldn't find parking spaces because people were working hard even on the weekends. This inspired me and I said to myself, "This is exactly what we want and what we are looking for." We wanted to see this happen in China, in India, on the other side of the globe. I returned home with the American Dream seared deeply into my mind.

Ten years have passed and the past ten years have been tough for us. We have grown from 18 founders in my apartment to 12,000 people – and we are going to hire another 5,000 new employees this year. We have a big vision for tomorrow and the day after tomorrow. We have grown from one member to over 30 million members using our services in China, with an additional eight million SMEs using our services around the world outside of China. We have grown from B2B, to B2C, to C2C, to online payment. People had complained that China could not be successful in Internet e-commerce because of this and that. Against these voices, we defiantly said, "Let's build it up." People said, "China doesn't have a payment system." Again, we said, "Let's build up a payment system." People said, "China doesn't have logistics." We said, "Well, let's build up the logistics together with other partners." We made it happen. Now we are back in the U.S. We are again looking for American dreams. We are looking to the great iconic companies that we want to learn from and gain insight on what they hope to achieve in the coming ten years.

During the course of the trip I was very surprised to discover that most of the companies we visited were in a very depressed mood. At the same time, we also witnessed inspiration and passion. One example I want to highlight is Starbucks. Their team shares a dream and they know what they are doing. They want Starbucks to spreading a culture for change and to make a positive influence on the world. When they talk about their products, you see the sparkle in their eyes. They know what globalization means. They know how they can help people around the world. One of my favorite sayings that I saw on a wall at Starbucks is "The only easy day was yesterday." I think that sums up today's situation.

Earlier this year, I was having dinner in a restaurant. The owner of the restaurant came up to me—she knows me since she is one of our Alibaba.com members—and said, "Jack, what do you think about the economy? It's terrible. How long do you think this situation is going to last?" I said, "Well, end of this year." "Wow," she replied, "this year the economy is going to recover?" I said, "No, by the end of this year you are going to get used to it." We all have to get used to it. The wonderful yesterday is gone. The wonderful days of 2007 may never come back. We have to forget about the past and look towards tomorrow, but I think this is where a lot of people have difficulty.

I sincerely think this economic crisis is no longer a crisis today. Last year, before all the bad news in the fall, that was the crisis and people should have worried during that period in time. The topics of discussion among people I encountered during the past few years raised my alarm bells. People were talking about IPOs, about stock prices, about how much money you could make. People never talked about the value they were creating for the customers. At every panel, every meeting and every conference I went to, the bankers were telling people, "Go for the IPO! You can get more money. You can raise more money." But they never told you why you should raise the money. Intuitively I knew there was something wrong with the picture. My experience from the Internet bubble got me thinking, "Wow, something wrong is happening." In July, I wrote a letter to the whole staff that said, "An economic winter is coming. Let's get ready for it." This was just one month before the start of the Beijing Olympics. We as a company began to plan and prepare.

What we should be doing now is taking action. Even though the smartest people in the world could not foretell the financial crisis, I bet the business people who were in close contact with their customers sensed that something was wrong on the horizon. I bet if you paid attention to your customers, you would definitely have noticed that something was wrong with the environment.

I think today's economic situation is the growing pain of the world economy. It is the growing pain of globalization. Ten years from now, I strongly believe that there will be more successful people in the world than there are today. Ten years from now, I believe there will be more successful companies than there are today. Those who take action today have the potential to be the next Google, the next eBay, or the next Facebook. If I had not take action ten years ago to create Alibaba based on my dream, I would not able to stand here today and speak with you.

One of the beliefs I have is that if Jack Ma can be successful, then 80 percent of the people in this world can be successful. I don't have a financial background. I don't have a rich father. I do not have relationships with any government officials. I failed three attempts to enter university. Nobody has ever said to me, "Jack, you are smart. You are clever. You are a genius." It was only after November 6, 2007, when Alibaba.com launched its IPO, that people suddenly started to say, "Jack, you are smart."

The reason why I think Alibaba survived is because we have long held onto the belief that customers are number one, employees are number two and shareholders are number three. What I reiterate again and again at the company is that it's the customer that pays you. It's the customer that distinguishes you. It's the employees that stay with you. A lot of shareholders can say, "Jack, give me shares. We will be longtime shareholders." However, when disaster hits, they're all gone. On the other hand, my colleagues stay with me and I appreciate that. Most importantly, at Alibaba, we still have the dream in our hearts. We want to change the future.

One other thing I want to share with you is from a movie that came out around ten years ago. It is one of my favorite movies, an American movie called Forrest Gump. It is because of this movie that inspired me to think about helping the small and medium sized companies. In it, Forrest Gump had gotten into the shrimping business after being persuaded by Bubba's passion for shrimp. It inspired me very much and so I said, "Let's focus on catching the shrimps instead of catching the whales. Let's help the SMEs." Forrest Gump is not a smart guy. (Most of the smart guys went to the banks and created problems there.) But he is focused. He is not talented, but he is very, very hard-working. He is very simple. He is very optimistic. These qualities are invaluable in these times. The key idea I took away from the movie and shared with my wife, my parents and my friends, is summarized in the quote by Forrest Gump: "Life is like a box of chocolates. You never know what you are going to get."

I think this financial crisis will convince the world that it is important for businesses to make a return to the basics, back to the fundamental values of business. The world is not lacking money today. Instead, we are lacking in spirit, lacking in dreams, lacking in unbridled enthusiasm and hope. We are lacking in the values we had committed to and promises made as business people.

Doing internet business in China is not easy. Being in the internet industry is not easy. You must be very competitive. You can be competitive not only by being smart, but by being hard-working. We are competitive because we have a dream to realize. We are competitive because we think the internet can change the world and can improve China. There were more than one thousand chances that we could have failed – the odds were against us and I don't know why we survived. One thing I do know is that there was one thing we never gave up and that is hope, the hope to survive.

Right now, there is a huge storm outside. If you hide yourself well, you will get through it. If you do not prepare, however, you will die. I share this thought with people in my company over and over again: Today it is difficult; tomorrow is much more difficult; but the day after tomorrow is beautiful. But most people die tomorrow evening. If you do not work hard today you will never see the sunshine.

After this trip, I will go back home and tell people, "Let's catch this chance. Let's do something different." To those of you here who have been laid off, I urge you to think about doing something different. Don't cry for yesterday. Let's plan for tomorrow. Tomorrow will be tough, but tomorrow will be better. We should set an example for our young people.

If you are young, do something for yourself. Don't wait, because you cannot count on the government to save you. If you think about it, only when you take action can you change your situation. Nobody is going to help you, only you can help yourself—this is actually something I learned from the Bible. Only if you take action, only if you take care of yourselves, only if you do something different will you survive to see the sunshine the day after tomorrow. Thank you very much. ◆

A Time for Transatlantic Leadership

A CALL FOR A TRANSATLANTIC FREE TRADE ZONE

Address by JIM QUIGLEY, CEO, Deloitte Touche Tohmatsu

Delivered to the British-American Business Council, Washington, D.C., April 30, 2009

Thank you, Chris [Nicholson]. And good morning everybody.

I want to begin by thanking Ambassador Sheinwald for hosting a very enjoyable reception last night. It was a delightful way to kick off this very important conference dedicated to strengthening transatlantic links.

I also want to express my gratitude to the British-American Business Council for organizing this conference … and I thank all of you for attending.

This conference comes at a difficult time for the global economy. Much of what we have seen unfold we properly describe as unprecedented.

As we watch for positive signs, the one consensus is that the rate of decline is slowing.

And while the line is flattening, it has not reached bottom yet … and we all hope that will occur this year.

White House Chief of Staff Rahm Emanuel has famously said: "You never want a serious crisis to go to waste."

In some ways the current economic crisis makes it much easier for all of us to appreciate the importance of strengthening the transatlantic community … and coordinating our economic recovery efforts.

So when it comes to strengthening the transatlantic relationship, we shouldn't let this crisis go to waste.

Of course … the British-American Business Council … with over 25 chapters throughout the UK and North America … and with something like 3,500 member companies … the BABC always knew about the importance of this relationship.

You've been out in front on this for a very long time. And I congratulate you for that.

I also want to acknowledge at the outset that the special relationship between the US and the UK really is at the heart of the broader transatlantic partnership.

We've seen the special relationship between the UK and the US in action many times over many decades.

This despite the famous observation—usually attributed to George Bernard Shaw—that we are two countries divided by a common language.

More accurately, we are two nations united by a common purpose and a common set of core values.

Our special relationship was on display recently when Prime Minister Gordon Brown visited Washington and addressed a joint session of Congress … and again at the London Summit … where Prime Minister Brown and President Obama sounded many of the same themes—with regard to international coordination in our economic recovery efforts and the importance of resisting protectionism.

These are themes I'm sure we'll be hearing quite often in the course of this conference. Indeed, I'll be echoing these same themes myself in my brief remarks.

This morning I'd like to talk about leadership … about what I regard as the central importance of transatlantic leadership as we chart the course for global economic recovery and sustainable growth in the years ahead.

And I'll do so in the spirit of exploring ways we can lead more effectively by strengthening the institutional and regulatory frameworks that bind our community together.

In my capacity as co-chair of the Transatlantic Business Dialogue—which we affectionately refer to as TABD—I think it would be timely and interesting to share some of our major priorities, especially our recommendations related to the Transatlantic Economic Council—or TEC.

But first, I want to take a few moments to highlight something that gets overlooked far too often and far too easily …

I'm talking about the relative size and importance of the transatlantic community in the overall global economy.

In all of the doom and gloom about the global economy, we often lose sight of the fact that the transatlantic countries have been … and will continue to be … THE indispensable engine for future growth, innovation and sustainability for the global economy as a whole.

Just consider the following statistics. The facts are, in my view, compelling.

These numbers come from the very informative book by Dan Hamilton and Joseph Quinlan -- The Transatlantic Economy 2009.

Here's one number for you: $30 trillion dollars.

That's a big number. Does anybody know what that number represents?

$30 trillion is roughly the combined GDP of the US and the EU.

And that's really an astonishing level of economic productivity.

Even by today's standards of staggering deficits … and trillion-dollar bailouts … and enormous stimulus packages … $30 trillion in economic output is … well … it's pretty remarkable.

In fact, that's about 45 percent … just under half … of the world's total GDP!

And consider this: from the start of this decade to mid-2008, Europe received nearly 60 percent of total US direct foreign investment.

And this is by no means a one-way street.

According to the Organization for International Investment the United States is the top recipient of EU Foreign Direct Investment … amounting to about 70 percent of the total FDI in the United States.

And so … on behalf of a grateful nation, I want to say Thank You to our European friends for that investment.

But here's the real eye-opener from my perspective: In 2006, there was more EU investment in my home state of Utah than total EU investment in China and India put together.

And by the way … two-thirds of EU investment in Utah came from the UK.

Now … don't get me wrong. I'm not diminishing investments from the EU to other parts of the world. I'm just putting things into perspective.

Here's another important piece of data: In 2006, 65 percent of all US foreign affiliate spending on R & D went to Europe. Two-thirds.

And, also in 2006, 39 percent of all R & D spending by foreign affiliates in the U.S. comes from just two countries … Germany and the UK.

The point is—European countries are investing heavily in the US … and the US is doing the same thing in Europe.

And this open investment and R & D relationship results in several very important things—not the least is the creation of up to 14 million high-quality jobs in services and manufacturing on both sides of the Atlantic.

In these difficult economic times that's a very good thing to keep in mind.

And I think it's safe to say that we share a mutual interest … it seems to me … in working together to ensure that these investments continue … and even expand … and that these jobs continue to exist … in the years ahead.

I think about that famous quote from Mahatma Gandhi—I'm sure you've all heard it—"Be the change you want to see in the world."

Along those lines … the US and the EU … working together … can be and should be the engine for economic recovery and sustainable growth that we'd like to see in the world.

That should be our mission … recognizing and appreciating that we're all in this together.

The London Summit echoed this sentiment just a few weeks ago … and I want to read a brief section of the G20 Statement because it addresses several points I'm eager to underscore this morning.

Quoting from the April 2nd statement:

"We have today therefore pledged to do whatever is necessary to:

- restore confidence, growth, and jobs;
- repair the financial system to restore lending;
- strengthen financial regulation to rebuild trust;
- fund and reform our international financial institutions to overcome this crisis and prevent future ones;
- promote global trade and investment and reject protectionism, to underpin prosperity; and
- build an inclusive, green, and sustainable recovery."

I think that sums up the situation very clearly.

The proof will be in the pudding, of course … making sure these things happen.

Which brings me back to the subject of leadership.

I think this is THE time for strong transatlantic leadership.

And the question for us isn't so much whether we should lead … we already know we should.

The question really is how … exactly how should we lead … what steps should we take?

And here's where I want to draw on my experience as co-chair of the Transatlantic Business Dialogue. Through that experience I've gained a much greater understanding of the complex web of important trade, investment, and regulatory issues in the transatlantic relationship.

Now … because my focus this morning is on leadership … I want to spend some time talking about an important—but perhaps not widely known—transatlantic institution called the TEC … the Transatlantic Economic Council.

The Transatlantic Economic Council (TEC) was created in 2007 at the US-EU Summit here in Washington DC. And I think the TEC offers a dynamic and effective mechanism for transatlantic leadership.

And I should mention that TABD is privileged to be recognized as the official adviser to the TEC on behalf of the business community.

By highlighting the potential role of the TEC, my intention is not to in any way diminish the ongoing collaborative efforts taking place bilaterally … between the US and the UK—for example—or multilaterally at the recent London Summit and the Summit in Prague … or the upcoming G8 summit in Italy.

All of these forums … and many others … are extremely important as we work to stabilize the global financial system … and extricate ourselves from the economic contraction we're experiencing.

But taking everything into account … I feel strongly that the Transatlantic Economic Council (TEC) provides an extremely effective platform for the transatlantic business community as a whole to influence the direction of policy … a platform for translating good intentions into concrete policies that can contribute to a revitalization of the global economy.

In short, the TEC is an ideal platform for transatlantic leadership.

So with that … let me describe briefly for you some of the short-term priorities that we're proposing to the TEC … and then I'll give a quick overview of some key principles that we think should guide the activities of the TEC going forward … as well as several longer-term strategic issues we believe the TEC should tackle.

- First of all, the TEC should resist protectionism by identifying trade barriers and market distortions … and develop a process for removing them.
- The TEC should ensure transatlantic alignment in areas where new regulation is proposed, for example, credit rating agencies. Regulatory arbitrage is not in the best interests of these global markets.
- We should also continue making progress toward the

adoption of a single set of high-quality, global, financial reporting and accounting standards.

- In fact, I believe these reforms are more important than ever given the urgent need to rebuild confidence among investors and other stakeholders worldwide in financial reporting and accounting standards.
- I was pleased that the G20 statement included a call for … "the accounting standard setters to work urgently with supervisors and regulators to improve standards on valuation and provisioning and achieve a single set of high-quality global accounting standards."
- Clearly the financial crisis and global recession have complicated the reform process, but we should not lose sight of that ultimate goal.
- In terms of near-term innovation efforts—we believe the areas of focus should be in healthcare and energy. We think this focus has the potential to stimulate a new phase of job creation, growth and prosperity … in extremely beneficial areas of the economy.
- In the energy field in particular, we see a real opportunity in a disciplined and focused approach to transatlantic regulatory alignment, greater energy efficiency and enhanced cooperation in the development and deployment of new technologies.
- You could call this a new kind of Green Revolution.
- Connected to innovation … the TEC needs to devise specific, concrete steps with regard to protecting intellectual property rights on both sides of the Atlantic … and around the world.

Those are some short-term priorities. Now let's turn to a longer-term perspective.

For starters, we think it would be very beneficial to enunciate a clear set of vital economic and regulatory principles to guide our leadership and coordination efforts going forward.

With regard to trade—it should be barrier free and fair.

Protectionism should be explicitly opposed so as to avoid new restrictions and market distortions.

Investment should be open and non-discriminatory.

Regulations should be based on equivalence or mutual recognition and science-based.

In addition to these broad principles … we'd also like to have the TEC focus on a range of important strategic issues.

And here we're suggesting that the TEC should address longer-term issues within a five-year time horizon … establishing clear priorities, milestones, and benchmarks … while embarking on a real effort to strengthen stakeholder involvement in the process.

That's extremely important.

And we believe these strategic issues should link directly to ongoing efforts to promote economic recovery and long-term sustainability.

In this regard, the TEC could be an excellent forum for discussing the use of regulation in a positive way to stimulate economic growth, innovation and sustainability without … and this is critical … without diminishing the global competitiveness of our companies on both sides of the Atlantic.

Also from a strategic viewpoint, the TEC could become a champion of innovation as a driver of job creation, growth and prosperity.

And we could help to develop a joint transatlantic response to common issues with third countries.

So that covers the TEC. Now to wrap up my remarks, let's go back to where I started, and focus on leadership.

The idea of leadership is often associated with having a clear vision … and an unshakable commitment to a big idea that motivates and inspires others.

I'm not sure I have a single inspiring big idea to leave you with this morning.

But I would like to propose three things that could at least be part of the conversation during this conference … and beyond.

And I feel fairly certain that the British-American Business Council's membership would find these proposals appealing.

The first idea I want to mention is something I strongly favor … but I also recognize there is some resistance from various quarters.

I'm talking about the creation of a Barrier-Free Transatlantic Market.

In view of the difficulty we've had recently in addressing various agricultural issues, a truly barrier-free transatlantic market will take some time and a great deal more work.

But it's also the kind of free-trade BIG IDEA we should be thinking about to counter the rising chorus of protectionism.

A barrier free transatlantic market would be a major step toward growth, innovation and sustainability in the global economy.

So that's one idea.

Another viable option to consider is the creation of a transatlantic free trade area in services.

This proposal has the advantage of avoiding the thorny agricultural briar patch.

But as everyone here is well aware … the services sector accounts for an enormous percentage of GDP on both sides of the Atlantic … about 70 percent of the EU's total GDP … 76 percent for the UK … and a whopping 79 percent for the US.

A move toward a transatlantic free market in services would strike a powerful blow for free trade … and I believe this proposal is well worth considering.

Finally, there's the idea of creating a transatlantic free-trade area for environmentally friendly products and services—call it an eco-trade zone.

This could jumpstart that new Green Revolution by putting the EU and the US economies on an innovation fast track toward more sustainable and environmentally responsible economic growth.

What unites all three of these proposals is that they offer a free-trade counterweight to the pressures of economic nationalism and protectionism.

These are the kinds of ideas the business community should debate and refine with an eye toward developing a strong, responsible, free-trade agenda that we can all embrace.

Together with a successful conclusion of the DOHA talks, making progress toward this free trade agenda would help to ignite the engine of sustainable growth and innovation on both sides of the Atlantic … and beyond.

But let's be clear … this kind of progress will only happen through coordinated and effective leadership on the part of the transatlantic community.

And it will only happen if our agenda serves greater societal and environmental needs—not just the interests of our individual companies or the business community generally.

We have an obligation … it seems to me … to work together for the greater good … not only in our own self-interest but also on behalf of all stakeholders in our respective countries.

In other words … echoing Gandhi… let us BE the positive engine of sustainable growth and prosperity that we'd like to see in the world.

That's what transatlantic leadership should be all about.

Many thanks for your attention this morning. And thanks again for being here at this important conference. ◆

Innovation

DISCOVERIES ARE IMPORTANT IN EVERY SECTOR

Address by JUDITH RODIN, President, Rockefeller Foundation

Delivered at the Acceptance of Charles Waldo Haskins Award, Stern School of Business, New York University, New York, New York, April 28, 2009

Dean Cooley, thank you for the kind introduction. It's a special treat to accept this honor from a fellow Penn Quaker. Trustees, overseers, and distinguished guests, thank you for the warm welcome. Family and friends—especially my husband Paul and son Alex—thank you for coming.

Tom, you remind me of the wonderful story about the dean and his leadership team. In the middle of their meeting, an angel burst through the door and said to the dean "excuse me, sir, but god has decided to reward you for your exemplary leadership." "You have three choices," the angel continued. "You can choose vast wealth. You can choose eternal youth. Or you can choose infinite wisdom." The dean paused only for a moment. He was, after all, a serious scholar. You know the type: Ph.D. from Penn, member of the Council on Foreign Relations, author of a weekly column for Forbes. Of course, he chose infinite wisdom. "Your wish is my command," said the angel, disintegrating into a cloud of smoke. Now, the dean appeared bathed in a halo of light. The leadership team eagerly awaited his first pearl of wisdom. The dean sighed. "I should have taken the money."

As an honorary NYU degree recipient and member of the family, my first message tonight is: Thanks to everyone gathered for delivering Dean Cooley's money. You're truly angels.

My second message is of gratitude and humility for the honor you confer. The Haskins Award bears the seal of a school that produces some of business' brightest dreamers and doers, year after year, generation after generation. It carries the insignia of a faculty that remains part of, not apart from, vital and vigorous public debate.

The Haskins Award also represents the legacy of an unheralded historical figure with continuing significance. Before Charles Waldo Haskins helped establish NYU's business school—one of the first professional business schools in the nation—he worked diligently to bring impartiality and integrity to professional accounting. He's regarded, in fact, as the field's founding father.

Haskins' innovations—including the codification of qualifications for CPAs—were crucial preconditions for unprecedented expansion and prosperity in the United States. By the Progressive Era, America's burgeoning economy didn't only need new regulations to save capitalism from the excesses of the Gilded Age. It needed trained, dispassionate experts—public accountants—to transparently measure and monitor the exchange of currency and commerce.

Our time is very different than Haskins', but one thing remains the same: accountability is again in high demand. I'm proud to accept this recognition in Haskins' name and spirit—with appreciation for his legacy of fair play and honest dealing.

For the next few moments, I'd like to talk about innovation on a larger scale. Think, if you will, about a contemporary of Haskins, Thomas Edison—also born in the middle of the 19th century, also a shepherd of transformational change. As Haskins ushered in the era of modern accounting, Edison was arguably the first modern innovator: not just an early electrical tinkerer, but a systems thinker—a visionary—who recognized that how you innovate is important as what you invent.

Tim Brown, CEO and President of the design firm IDEO, said it well in a recent Harvard Business Review essay: "Edison's genius," Brown wrote, "lay in his ability to conceive a fully developed marketplace, not simply a discrete device. Edison understood that the light bulb was little more than a parlor-trick without a system of electric power generation and transmission to make it truly useful. So, he created that too."

Today, for firms and institutions in every sector—from the smallest nonprofits, to the biggest corporations, and at every level and branch of government—the financial crisis affords a crucial moment for innovation. And, perhaps surprising to some, according to the Wall Street Journal, America's largest companies spent nearly as much on innovation during the last quarter of 2008 as they did during the last quarter of 2007, even as revenue declined nearly 8 percent. Call it the lesson of the iPod, the fruit of Apple's 42 percent increase in R&D expenditures during the downturn between 1999 and 2002: Businesses that sow seeds of innovation during periods of economic contraction, studies attest, perform significantly better over the long-run than those that make big cuts.

Too often, though, innovation is considered a right-brain activity. It's equated with intuition—with a feeling that emerges from the gut-up or cortex-down. But innovation can also be a left-brain skill—an achievement of methodical experimentation, not just "aha!" inspiration. Innovation is a way of working, not just something you work on. Not only a product; a process.

In today's world, innovation processes look different for two important reasons: First, because of technology and global interdependence, innovations that work in one place can be transmitted, translated, and transformed to work in another. Second, the intellectual processes—the methodologies—that enable innovation are increasingly user-driven, and not only by people in Manhattan, but also by those in the far reaches of Mumbai and Manila.

Indeed, technology married with interdependence gives birth to momentous changes not only in the ways we lead our lives and engage with the world, but also in the ways we learn, store, and share knowledge. Information is no longer a static, objective article, classified by Dewey decimals. It's fluid. Because of innovations like wiki, for example, shared, collaborative knowledge development emerges in real time from people with diverse experiences and perspectives.

The implications are incredibly far reaching, particularly when applying "open" innovation, an approach that emerges from the revelation that the collective wisdom of strangers can be channeled to develop solutions to an array of challenges. Consider the case of InnoCentive, a spin-off of the Eli Lilly Company, which linked together a Web-based network of 170,000 engineers, scientists, and entrepreneurs, around the world. They compete for prize money to find solutions to questions that confounded people working in only one place.

This was a great resource for pharmaceutical R&D. Many discoveries emerged at very low cost. Scientists solved difficult challenges the way some of us do crossword puzzles. In fact, this kind of "open" innovation—called "crowd-sourcing"—is a boon to all brands of business. It's a powerful apparatus that engages thousands of minds, each approaching a problem in a different way, in the generation of cutting-edge ideas.

At the Rockefeller Foundation, our wager was that InnoCentive could enable competitive problem-solving in social spaces, not just commercial ones, by connecting people who wanted to make a difference with people who had the technical know-how to help.

For instance, Mark Bent, a former U.S. diplomat living in Texas, had invented a small, solar powered flashlight for use in communities without electricity. But when he wanted to modify his lamp so it could light an entire room or village street, he was stymied.

Mark described his problem to InnoCentive's online community, the Rockefeller Foundation offered prize money for the best solution, and an engineer in New Zealand proposed the most cost-effective idea. Within a year of Mark's solicitation, his solar-powered light was in production in China and in use across sub-Saharan Africa. Today, Marines and soldiers in Iraq and Afghanistan wield Mark's lights too.

But he was only getting started. Next, he wanted to create a solar powered antimalarial device. Once again, he posted the challenge and scientists from around the world competed to find the solution. Now, Mark is testing a solar powered mosquito repellant, made from human sweat, which could be cheaper and more effective than bed-nets. And the bigger lesson is that wiki-nomics work. If you want to solve a problem, ask everyone.

Ashoka's Changemakers, another Rockefeller Foundation grantee, developed a similar "open" innovation platform. They, like InnoCentive, pose development challenges online and invite competing applicants to submit potential solutions. The difference? In Changemakers' model, proposed solutions are published transparently and stay available for revision and refinement until an established deadline. This entirely new concept is called "collaborative competition."

Collaborative competition facilitates two broad areas of learning: First, it identifies clusters and blank spots among proposed solutions. Problem-solvers can easily see where their counterparts are focusing and where there may be white space to propose alternative possibilities. Second, it enables collaborative revision and iteration. The sooner applicants submit their proposals, the earlier they can see others' ideas, and the further they can sharpen their own thinking.

For example, the Global Water Challenge, a coalition of 22 leading organizations, sought cutting-edge approaches to help impoverished communities access sanitation and drinking water at low cost. Competing applicants from 54 countries submitted more than 240 ideas. Since every submission was available to every entrant, competitors collaborated spontaneously. The final winner included on-line contributions from countries diverse as India, Malawi, Kenya, South Africa, and the United States. With $1 million from Coca-Cola, the solution will now be tested in the field and taken to scale.

Still, the what was less important than the how. Hundreds of people, who never met each other—and likely never will—joined together to solve a common problem, pooling their expertise and putting their ideas into practice. This is a new way of working only possible in an interdependent world. This is smart globalization.

It also links to another discovery—one first and best understood by private designers like IDEO, which conceived Apple's first computer mouse and thousands of best-selling consumer products since. Innovation tends to be especially effective when it's user-driven—when innovators engage consumers in the design, instead of designing products in a lab and then testing consumer preferences afterward.

Toyota was at the vanguard of user-driven design—one of the reasons for their outstanding success. They also integrate the idea in their marketing campaigns. As one current commercial asks, "What if your car didn't come from a factory, but out in the world, where you actually drive? It would be better designed around you, the driver…reinventing the way you move."

We reasoned that, like with computers or cars, social sector problem-solving could have tremendous impact if the individuals and communities with the problems are included in the process of developing the solutions. In service of this notion, we funded a group called Positive Deviance. They try to identify specific behaviors that enable outliers or "positive deviants" to succeed where others do not—and then they encourage others to adopt these same behaviors.

Positive Deviance initially keyed on malnutrition in Southeast Asia. Researchers visited an impoverished Vietnamese village and immediately noticed that children in a scattering of families were in exceptionally good health. Upon closer examination, they discovered that, in these households, providers didn't wash away shrimp and crabs found in rice-paddies but, instead, cooked them along with their rice—adding protein to a carbohydrate-based diet. This technique, once unearthed, was adopted across the village—and then thousands of villages. It was another small, user-generated innovation that made a big impact.

This is one of Positive Deviance's many success stories. In a Pittsburgh Veterans Administration hospital, they determined that when all staff—not just doctors and nurses—frequently washed their hands, Hospital Acquired Infection rates dramatically declined. They, then, helped spread the practice in a number of health centers across the country.

And only a few weeks ago, Positive Deviance began work with a California school district, applying this same methodology in hopes of reducing drop-out rates among high school students. They are observing and interviewing high-achieving students in low-performing schools to identify what makes them successful and then and plan ways to instill these behaviors throughout the school system.

In the 21st century, innovators need neither laboratory access nor library cards. The laboratory is everywhere, and everywhere is the laboratory. What's more, innovation practices aren't only transferable from the private to the social sectors, but also the other way around. When Mohamed Yunis created microfinance to help the world's poorest communities, he never imagined that most commercial banks would eventually deploy it as a business model.

Or think about another example: Through kiva.org, a person-to-person, micro-lending Website, individual donors pool their resources. By combining their contributions, almost 400,000 lenders have contributed more than $50 million, usually $25 at a time. Lenders with only a little to give connect with micro-entrepreneurs for whom it makes a huge difference.

Now, we can see a similar technique maturing in the private sector. It's called "crowd funding." Customers can invest online in the latest music group or clothing designer—a dollar, pound, frank, or yen at a time—and earn a cut of the profits in proportion to their seed support. It's a new model of shareholding.

Let me close with this: Because of globalization and technology, we're not only loosely affiliated, but inseparably interdependent. We've seen and suffered the downside in the worldwide financial crisis. And yet globalization also unleashes extraordinary opportunities. It amounts to much more than different people in different places contributing to a supply chain. It enables every community to create and connect with innovations. And it means that as the world becomes smaller, what we know is far less important than how we learn.

A decade into the 21st century, we have an enormous new tool-box at our disposal. It comprises tools that revolutionize how knowledge is produced and shared, tools that transform the business of solving problems, tools that equip more people in more places to join in building a more inclusive and productive future.

When Alexander Graham Bell—another contemporary of Edison and Haskins—told his investors that his innovation would allow someone in Chicago to speak with someone in New York, one venture capitalist reacted by asking, "But what, in God's name, would anyone in Chicago possibly say to someone in New York?" What, indeed?

Like the invention of other tools—the telephone, the electrical grid, the accountant—the evolution of innovation practices helps people connect and communicate, compete and collaborate with one another in fundamentally new ways. These practices emerge not a moment too soon, for today is our once-in-a-generation opening for innovation in health care and infrastructure, energy and education, the environment and economy—21st century challenges that cannot be mastered with 20th century ideas.

I say to you, tonight: Innovation in every sector never has been more important, nor have the consequences been more profound. Thank you again for honoring me in Charles Haskins' innovative spirit. ◆

Preserving the Land Grant Act in the Era of the Modern Research University

EVERY CHILD DESERVES AN EDUCATION

Address by RICHARD HERMAN, Chancellor, University of Illinois at Urbana-Champaign

Delivered to Institute for Government of Public Affairs, Brown Bag Lecture, Urbana, Illinois, April 8, 2009

Thank you, Bob.

Today I want to talk to you about the legacy of the land grant act and the threats it currently faces.

Yesterday morning I sat with my grandchildren listening to Copeland's Lincoln Portrait. My earliest memory of that piece is listening to it on the Mall in DC and hearing Adlai Stevenson recite the wonderful words. As I prepared for today the words which struck me the most is that "the occasion is piled high with difficulty."

But I would also add that the occasion is rife with opportunity.

The reason that Illinois is such a great institution is its people and its broad offerings; its palette of arts and culture, science and technology—Krannert to NSCA, if you will.

But today I want to lean more on the research and tech transfer mission of this land grant university and I want to do so with President Obama's American Recovery and Reinvestment Act, AKA the Stimulus Plan, as a backdrop.

I see the Stimulus Plan as a worthy successor to the great education acts of last century, acts such as the Morrill Act, Smith Lever, the GI Bill, and the National Defense Education Act, which, I will talk about a bit later, changed the course of my life.

But one cannot dismiss the echo effect of research and tech transfer not only on our campus but in the world at large.

Because of our scale we can engage the large social problems the planet now faces, problems such as energy, nano technology, and high performance computing, for example.

And scale is important when discussing the land grant mission. When we were awarded the BP project it was not a coin flip that Illinois, a public university, received the project. In fact, our ability to successfully manage large scale, multi agency, and one-of-a-kind projects for the betterment of society is a key reason Illinois helped define the research university in the last century and the reason that we plan to do it again. As the nation invests and resets its priorities, as we respond to the renewed commitment to higher education and research by the Obama Administration's American Recovery and Reinvestment Act, Illinois is well positioned to take full advantage of this incredible opportunity.

Our ability to contribute to the solution of many of today's societal problems is based not just on excellence, which we have in great abundance, but also based on a sustained culture of creativity and innovation, two of this nation's most precious resources, and resources that we have in abundance at Illinois.

So, at the end of the day, our best technology transfer is human technology transfer. This is our true contribution to society and it is a noble contribution because those we graduate will go on to lead society.

We create human capital. What do I mean by that rather cold term, human capital? Our own Walt McMahon defines it in his terrific new book Higher Learning, Greater Good.

Walt writes, "Human capital is the knowledge, skills, and attributes acquired by investment in education and health throughout our lifecycle…human capital skills are not just used on the job. They are carried home with the individual, and affect the productivity and value of his or her time there. They are also used and are productive during time spent in the community."

Now I want you to listen to another quote: "Upon the subject of education, not presuming to dictate any plan or system respecting it, I can only say that I view it as the most important subject which we as a people can be engaged in. That every man may receive at least, a moderate education, and thereby be enabled to read the histories of his own and other countries, by which he may duly appreciate the value of our free institutions, appears to be an object of vital importance."

President Abraham Lincoln said those words on March 9, 1832. Note that these words on the power of education were delivered during his first known political announcement. This from a man whose education was of the bootstrap variety, an education based on the foundations of borrowed books read by lantern in the Kentucky frontier.

Today we would amend Lincoln's pronouns to be more inclusive, but the statement's intent is hardly dated, even 177 years after the fact. Lincoln's statement builds a seamless bridge to Professor McMahon's definition of human capital. After all Mark Twain said "History doesn't repeat itself - at best it sometimes rhymes."

Lincoln's and Walt's statements say this: Education will not only enlighten us, feed our unending human curiosity, increase our personal wealth and job satisfaction, but it will impel us to become more active and able participants in American democracy. Who can argue with that mandate?

Lincoln echoed the faith in education of another one of our great presidents, Thomas Jefferson. Historian Ronald Rietveld wrote, "He accepted Jefferson's announcement that; if the people are enlightened, tyranny and the oppression of body and mind will vanish. The Monticello sage also believed that an educated population would thus preserve constitutional principles and enact progressive legislative measures. Lincoln knew the Jeffersonian credo."

The Lincoln credo, if you will, was based on his faith that given the great, transforming tools of education that we will use them for the common good of humankind. I wholeheartedly agree.

Naive? Maybe.

Inspiring? Certainly.

Too lofty an undertaking? Absolutely not.

The belief in the power of education to transform and to offer opportunity and access to all is at the heart of one of the most transformative pieces of education legislation of Lincoln's presidency: the Morrill Act of 1862.

By the way, we are currently in final negotiations with the National Archives to host the original Morrill Act at Krannert Art Museum this fall in partnership with the Abraham Lincoln Bicentennial Commission.

Five years later after Lincoln signed this document, the University of Illinois opened its doors to students. I often find it amazing that although Lincoln never had the opportunity to attend an institution such as the University of Illinois nonetheless by signing the Morrill Act he was acknowledging that everyone "must receive at least a moderate education."

The Morrill Act changed access to higher education forever. Up to that point, college was rarified air for what scholar Anne Colby and her colleagues called, "a relatively small number of white, male students who were members of an economic and social elite" preparing for the "crucial preparation for the positions of social, economic, and political power and leadership" they were destined to assume.

By the early 1900s, only four decades after the Morrill Act was signed into law and following several other important education acts, access had been broadened to "a much larger and more diverse audience…[with a] greater emphasis on practical and vocational education."

This year, during Lincoln's Bicentennial, as grateful chancellor of one of the great modern land grant research universities that Lincoln helped to create, I return often to the idea of the Morrill Act as a guidepost in my attempt to increase access to public education, to create human capital. And, as you probably have inferred by now, I have found the document is as relevant and inspiring as ever.

Because of Lincoln's vision, the American university system is now the envy of the world, and I believe it will remain such. But it's not a rigid monolith. Higher education is always changing, and today it is responding to a more technological, information-based economy that demands highly skilled workers to fuel it. But, as it continues to change, we need to understand its basic principles that are social and educational in nature.

The three oldest institutions in the world are often said to be the Icelandic Parliament, the Catholic Church, and American universities.

Of course, if you've been following the news lately you may be wondering if the Icelandic Parliament still exists. We now know the Icelandic economy does not.

The Catholic Church has certainly faced its own challenges in recent years and I will just leave it at that.

Today, that third venerable institution, the American university, is in the middle of perhaps its greatest period of challenges, challenges I believe threaten the spirit of the Morrill Act.

Almost a century and a half after the Morrill Act, our country is vastly better off—even in today's recession--thanks in large part to the economic lift created by land-grant institutions. And yet we seem intent on starving the geese that have laid our golden eggs. Annual increases in tuition and fees make it increasingly hard, and in some cases prohibitive, for parents to send students to college. Implicit in this burden-shift is that users should pay more and states (or taxpayers) should pay less.

Perhaps that will change. Our new Governor Pat Quinn understands the threat to middle class families and threat to access. I believe we now have a friend in the statehouse, someone who understands that the University of Illinois is the flagship institution of higher education in the state. And it is.

This threat to access affects students from all social and economic classes, but we all know that these increases hit the middle class (what remains of it at least) and lower classes hardest. The danger is that the price for access to a "moderate education" will increase to the point that we withdraw from our mandate—and Lincoln's—to serve the public good. In other words, that Illinois will become a public university in name only.

I believe we cannot allow that to happen.

In this time of diminished financial support from state and federal governments, in this era of shrinking endowments and toxic assets, how do we stay true to the land grant mandate? How will our citizens ever experience the incredible transformative power of public education if they are denied access?

And, most chilling to me, whom will we choose to exclude as we narrow access and opportunity to the riches of public higher education?

Let's see who can guess the author of this quote:

"The lower middle class, the small manufacturer, the shopkeeper, the artisan, the peasant, all these fight against the bourgeoisie, to save from extinction their existence as fractions of the middle class."

If you guessed Karl Marx, you are correct. That appeared in a little, non-controversial piece of writing called the Communist Manifesto.

These are indeed curious times when a chancellor of an American university quotes the architect of a failed economic system.

But, surprisingly, his point is applicable to higher education in this nation in 2009: Because of rising costs coupled with decreases in state and federal support, American universities are faced with an untenable situation in which the middle class might vanish from our doors, or, as we have already been witnessing, the numbers of students from middle class families will be greatly diminished.

The increased user fees plus the present financial crisis adds an entirely new dimension to this problem.

And less educated citizens--a decrease in the creation of human capital--is exactly what this nation does not need.

The personal financial gain to those who have college degrees is well documented. Yet, I found the following fascinating: Consider the February unemployment statistics from the US Bureau of Labor Statistics. As you know the unemployment rate for the nation is around 8.1 percent. For those Americans without a high school degree that number balloons to almost 13 percent. High school graduates, around 8.3 percent. But notice the rate for those with a college degree or greater: 4.1 percent, or approximately half the national unemployment rate.

Another statistic, one that is often overlooked. As the share of an adult population with college degrees in a city increases by 10 percent, wages for everyone rise by 7.8 percent. The lesson: Live in a city with really smart people. Everyone benefits.

The author of the study that came up with that statistic is Harvard economist Edward Glaeser, who said, "Apart from weather, human capital has been the best long-run predictor of urban success in the last century."

And one could then say that living among the college educated offers some protection against downturns in the economy. So far the Champaign-Urbana area has proven to be somewhat recession proof because of the university, the Research Park and the many companies that are here as a result of having an abundance of highly skilled women and men.

Other college towns such as Ames and Iowa City, Iowa, and Logan, Utah, also have lower unemployment rates than their respective states.

Two thirds of Americans eighteen years and older only have a high school degree. If we keep squeezing access to higher education that number will certainly grow and we will continue to fall behind China, Korea, India, and other countries who are supplying our need for human capital in the fields that require a strong math and science skill set.

As it stands one in four Americans drops out of high school. This is tragic for any number of reasons, among them lost hopes and aspirations, the generational impact of low expectations, the collective loss of an American competitive edge, and the sheer cost.

Here in Illinois it costs taxpayers—you and I-- $221,000 over the course of a lifetime for each and every Illinois high school student who drops out. We currently have 230,000 dropouts in Illinois. They will make $450,000 less in their working lives. Their lives may be worse off than their parents and grandparents.

As Walt McMahon writes, we have "an excess supply of persons with limited skills in the U.S.…those with a high school education of less are becoming unemployed in much larger numbers…the comparative advantage of the United States has been due to its human capital (i.e. more highly educated and highly skilled workers). But this comparative advantage is rapidly diminishing."

As I said earlier, the United States' higher education system is the envy of the world. Many international students come to our shores to study, mostly at the graduate level but increasingly at the undergraduate level. Our international students (more than a half million) recognize this richness and the value of a degree from the United States.

But do we, American citizens, still recognize the value? Probably not as much as we should. Even though studies tell us most parents want their children to go to college there is still a widespread public inattentiveness to the benefits of higher education.

According to the 2004 study by the Public Agenda and the National Center for Public Policy and Higher Education, "The vast majority of Americans continue to believe that getting a college education is more important than it was in the past, that the country can never have too many college graduates, and that we should not allow the price of a higher education to exclude qualified and motivated students from getting a college education."

There has been an unwillingness to invest in the American innovation system as so eloquently articulated in the "Rising above the Gathering Storm" report, and spoken of by the report's chairman, Norm Augustine.

But this may be changing. As I mentioned earlier we are excited by President Obama's American Recovery and Reinvestment Act that has placed a renewed emphasis on science and places Illinois in a great position to capitalize on this new emphasis.

That same caution is also repeated almost daily by business leaders such as Bill Gates, who famously said, "We simply cannot sustain an economy based on innovation unless our citizens are educated in mathematics, science or engineering."

Chad Holliday, CEO of DuPont, put it more bluntly when he said, "If the US doesn't get its act together DuPont is going to the countries that do."

Given the trend of globalization and outsourcing Holliday' statement seems quaint and dated, but his point still stands.

We get that point, too. We understand internationalism and its increasingly higher profile in public research universities such as Illinois. Whether it is through our Title VI program, or Study Abroad, or simply through exposure to international students on our campus, we believe it is now part of the land grant mission to prepare our students to step seamlessly into the global economy. To have the skill set and the cultural awareness to negotiate their workplace whether in Bangalore, Beijing, or Bloomington. As you may be aware we just launched our first research center outside the United States in Singapore, the Advanced Digital Sciences Center.

But, sadly, back here at home, what used to be a given, what I call The Imperative, that subsequent generations would do better than previous generations, has stalled.

In fact, according to a report by the Education Trust, the United States is now the only industrialized country where young people are less likely than their parents to earn a degree.

Contemplate that for a minute: The United States is now the only industrialized country where young people are less likely than their parents to earn a degree.

The author of the report, Anna Habash, says, "The U.S. is stagnating while other industrialized countries are surpassing us. And that is going to have a dramatic impact on our ability to compete."

So how do we, in 2009, stay true to Lincoln's vision, the land grant mandate? How do we engage the seemingly overwhelming support that parents have for their children's college education?

To answer that let me share some of my experiences as the first member of my family to graduate from college.

Let's go back, yes way back, to my very first day of class as a freshman at Stevens Institute of Technology in Hoboken, New Jersey. A day I will never forget. I settled into my seat with my new books, my notebooks and pencils. I used a lot of erasers back then. Now I just delete with a virtual eraser.

Let it be noted that in that first day I was prepared. To answer that a rational number is the quotient of two integers. I knew that. But what I got instead on that first day was the professor saying, "Look to your right. Look to your left. One of you won't be here." He was correct.

That was the standard greeting for students in those days. It spoke to a competitive rather than a nurturing environment. That's a far cry from today when our goal is to give a kid an opportunity. We no longer scare freshmen that way and that's probably a good thing.

After Stevens, I went to graduate school at the University of Maryland on the National Defense Education Act of 1958. Cost was a major factor for both my undergraduate and graduate career. The Act was a response to the Soviet Union's launch of Sputnik. No doubt the Cold War prompted the Act, but the idea was excellent: A recommitment to science and technology education as well as other areas for the next fifty years to ensure that the United States stay relevant in the changing world ahead.

As I said at the beginning of my talk, the NDEA changed the course of my life and it transformed the educational landscape in America. But now, 2009 has arrived and it is hard to find that kind of national, coordinated commitment. The planet is even more technological than ever, global competition is intense and, even with the Cold War in our rearview mirror, I doubt any of us feel any safer today than we did in 1958.

I often wonder, where is the renewed commitment to what arguably continues to be the best avenue to social mobility? A renewed commitment to the greatest economic engine this nation has?

Where is the excitement in this post-Sputnik era to once again lead the world in science and technology education? Where are the initiatives from our federal and state governments?

We have worked hard to increase access through scholarship programs such as Illinois Promise and the Chez Scholarship programs. We provide full financial support for tuition, fees, and room and board. In return, students provide us with their energy, their ambitions, and their successes. Current students in these programs come from a variety of ethnic backgrounds, almost all from Illinois. In many instances they are—like I was--the first members of their families to attend college.

I am delighted to report that we will graduate our first Illinois Promise class next May. These are some 100 bright, motivated Illinois students who without our financial support would not have gone to college and would not achieve their goals.

A recent survey of a majority of the 2009 I Promise graduating class was equally delightful. Personally, it was validation that this program that I started with a couple of phone calls to donors—much to the chagrin of our development staff—was a smashing success.

Almost all of the IP scholars will graduate on time; fifty percent have been on the Dean's List; 15 percent are members of an Academic Honor Society; 25 percent have been recipients of other academic or service awards; 22 percent are going on to get their master's; 10 percent will pursue a doctorate.

So here is my answer to that earlier question: How do we, one of the great public research universities of modern times, stay true to Lincoln's vision, the land grant mandate?

I believe if we are to hold true to the Morrill Act we cannot exclude the broad economic classes. As I said before we cannot sit back and watch the middle class to disappear from our doors. Nor can we allow the lower economic class to continue to fall behind and not offer the best and brightest from that demographic a financial life line.

We must expand access so more bright young people across the entire economic spectrum can experience the transformative power that comes with a college education.

Secretary of Education Arne Duncan, who grew up on Chicago's South Side, recently said:

"Providing every child in America with a good education is both a moral imperative and an economic imperative. It's also a matter of social justice. It is the civil rights issue of our generation—the one and only way to overcome the differences of wealth, background and race that divide us and deny us our future."

Secretary Duncan is right. Give these bright young people the tools to succeed, and then stand back and watch them achieve.

And you know what? It works. I see every day on the Illinois campus.

Listen to the words of Illinois Promise Scholar Yvette Vazquez, who will graduate with a degree in elementary education this May: "I will soon be in a position to make a difference. The most difference that I will make will be by 'paying it forward.' This will be through actions that will allow me to demonstrate my understanding of being selfless. As an educator I plan to make a difference one child at a time. I hope to not only help them achieve to their highest potential, but to help them find their inner strengths that will get them through their weakness moments."

Somehow I think our sixteenth president would be just as pleased as I am upon hearing those words.

Thank you for listening. ◆

The Future of Telecommunications

A DIFFERENT WAY TO LOOK AT THE ECONOMIC CRISIS

Address by DIDIER LOMBARD, Chairman and CEO, France Telecom

Delivered to Low Memorial Library, Columbia University, New York, New York, March 27, 2009

Ladies and Gentlemen; Dear Students,

It is a very special moment for me today. First, because it is rare that I have the opportunity to stand before so many talented and intelligent young people. In France we call you the "crème de la crème" and it is a great honour for me to congratulate you all on your MBA degrees from this prestigious University.

Second, there is a more personal reason why I am so happy to talk in front of you all today: my son Tom is studying at INSEAD and is currently in Singapore—I guess some people from the INSEAD are here today. So there is added pride.

I wanted to talk to you today about telecommunications. Through the past few decades I have witnessed many revolutions in the telecom world: not many of you here today will remember the old fashioned telephones of the Sixties, let alone payphones and the pigeon post! And how many of you remember the cumbersome mobile phones that needed their own separate carrier case because of their size—not to mention desktop computers that took up many square meters of floor space!

Today, technology changes at such a pace that ten years from now, who knows where we will be? And of course, France Telecom-Orange also has adapted, evolved and grown to meet this challenge head on, and has become one of the leading telecoms operators in the world. In short, almost 3% of the world's population—that's more than 180 million people—are now customers of France Telecom-Orange. We are now present in 31 countries around the world, including in Africa and the Middle East.

Just to give you an example, when we entered Egypt in 1998, we had no customers. Today, we have more than 20 million. This is one of the numerous win-win stories we've built over the last years in emerging countries. Now especially, mobile phone usage in sub-Saharan Africa is a growing market.

Innovative technology is what France Telecom is all about. We are number 1 in broadband in Europe and number 1 in TV over the Internet in Europe. We also have one of the 50 biggest brands in the world—Orange—and I believe Mary McDowell from Nokia will talk about the power of brands this afternoon.

But above all, telecoms and France Telecom are all about connectivity. How many of you here today have a mobile phone with you right now? And a Blackberry? My guess is all of you. This connectivity has created what I like to call a "global digital village": the idea is that telecoms linkages have progressively brought people together, tightening space and time… and now the world sometimes looks like a small village rather than a vast globe. This is how I conceive the role of France Telecom-Orange as a company fully "immersed" in society.

Let's look forward now. This connectivity is not only a convenient and pleasant thing. I believe telecoms will help drive the economy through these uncertain times. It's very hard to speak at a conference these days without talking about the financial crisis. But don't worry. I won't go through a long list of its causes and consequences. Instead I would like to give you a point of view on the crisis from a European global telecoms operator.

I am strongly convinced that a significant part of the recovery will come from new technologies. Not in the chaotic way of the 1990's; but in a more controlled way. We have estimated that telecoms, and more generally speaking the ICT sector, can contribute +0.5 % GDP growth every year in the industrialised countries, both through additional investments and, more importantly, through enhanced labour productivity.

Why do I say that? Because telecoms is one of the rare sectors currently going through an accelerating transformation, while the financial crisis is still continuing. Customers have changed as a result of digitalisation and more powerful networks. In the past we sold a copper line access and a phone. The customer was passive. Today our customers want to decide the content of their TV programs, when they want to watch a movie and on which device. More and more our customers are producing their own content.

In California in 2007, user generated content was equally as important as commercial web content. Our customer has evolved, becoming a "vibrant" node in a multi-meshed network. He's not just asking for a technology, he's buying a service. And all these nodes have organized themselves into "social networks" like Facebook… Those of you who are not on Facebook in this room, please raise your hand?

This has started a virtuous circle between human and physical networks. We are at the beginning of a fundamental change in our industry, but this shift goes far beyond even that. The intelligence brought in by networks also will impact our society.

A first indication is the increasing speed of innovation. We can just look at the number of small applications emerging every week for mobile phones, like iPhones. Innovation moves from what I call the "cathedral" mode to the "bazaar" mode. Open source becomes open innovation and it is not limited to IT applications. Every "node" in the network can easily exchange ideas and contribute to problem solving. The internet comes to resemble a neuronal network increasing the overall knowledge of our society. On top of this, with the next generation of the internet, objects will become more "intelligent" and connected so that they communicate among themselves (what is known as M2M applications).

At the same time, the value chain of the sector is imploding. Traditionally, our ecosystem was quite simple with basically two layers: the operators and the equipment suppliers. It was a fairly peaceful co-existence. We could also see the equipment suppliers moving into handsets, like Nokia and Ericsson.

On top of that, two other layers have appeared in the last decade: the internet services and the content producers. New business models also emerged with substantial impact on the dynamics of the ecosystem, in particular audience-based business models, or so-called "free" models.

I could talk for hours about the free models. But please do remember one thing: free does not exist! "There is no free lunch," as you say here. You always pay: maybe later, maybe in another way, but you always pay in the end. This model works as long as the person who enjoyed the service is the one who pays, and as long as the person who provided the service is the one who gets paid.

This is exactly the problem with the free model of Internet services: The model relies on the production of interesting content and the evolution of networks to deliver that content to customers. Unfortunately, the latter players—the content and network providers—do not receive revenues from advertising! I can come back on this point later if you want.

For this reason and for many others, today we see many players seeking to establish themselves in other layers of the value chain to capture additional revenues. Apple creates its own mobile phone. Google acquired some licenses for telco services. And we at Orange invest to position ourselves in the service layer. Once you understand this, you understand almost any article in the newspapers about our sector: it is all about grabbing some value from other layers.

I know many of you won't work in our sector, but I think my little model with layers is still interesting, as it prefigures what could happen in other sectors like the automotive industry, with new layers—electronic devices, etc—arriving on top of the current value chain. Try and think with this little model in mind and I'm sure it will help with understanding the moves of many of your industries.

In this rapid movement, every continent has its chance. America, Europe, Asia… and to a certain extent, Africa. For the past century, there are only a few economic sectors where Europe and Asia could be number one or at least a serious challenger to their American counterparts. Telecoms and new technologies are one of them.

Let me take the example of the history of the telephone. You all know that Alexander Graham Bell invented the telephone in the United States in 1876, right? Well, in fact, the US Congress acknowledged in 2002 that the telephone was invented by Antonio Meucci, from Italy, 5 years earlier, in 1871; so you see, America and Europe were very close to each other in this great innovation.

The same is true about commutation; which is the system that orients a telephone communication, allowing you to reach whoever you want in the world. In the late nineteenth century, communications were oriented by human beings: you would ask the telephone operator to talk with a particular person.

Things changed rapidly after 1891, when Almon Brown Strowger patented the automatic telephone exchange, revolutionizing the system of commutation. Later on, in the 1960's and 1970's, the first truly electronic—as opposed to mechanical—commutators were installed in France (and also one in Beijing). In the 1980's, in another domain, I also had the honour to be part of the GSM mobile standard group, which is now the leading standard in the world—and the only one allowing calls to be made from the US to Europe with a mobile phone.

In short, you can see that the telecom sector is one of the rare sectors where Europe has been leading alternatively with the United States. What is happening today provides great hope for America and a great challenge for Europe and Asia: America is now far ahead in terms of services on the telecom networks. This advance has a few names: Google, Yahoo!, Microsoft and so on.

So you see, while business leaders in the United States are asking questions about their companies and their business models, a few American digital companies are leading the world as never before in this area.

Just a few figures to illustrate this trend: In 2008, almost 10 billion dollars of revenues from online advertising crossed from Europe to the US thanks to Google-like companies; these figures should be around 20 billion dollars in 2012 if Europe does not react. The comparable figures for Asia are 8 billion dollars in 2008 and 15 billion dollars in 2012.

The networks area also is catching up: the fibre networks are now more deployed in the US and in Asia than in Europe. In the US there are almost 3 millions subscribers; in Japan there are now more subscribers to fibre than to copper lines. However, in France there are just a few thousands subscribers.

In this movement, America has a key role, because the leading players in the sector are American. And for Europe and Asia, this is a great challenge. Indeed, it is exactly how I lead the France Telecom Group, acknowledging that Google or Yahoo! are my new competitors. Who would have believed that possible a decade ago, to hear a chief executive of a world-leading telecoms company saying that Google and Yahoo! are his competitors? But this is the nature of connectivity and the "digital village" we now live in.

So here is the message I want to leave with you today. There are good reasons to look at the financial crisis in a more optimistic way when you think about telecoms and new technologies. This is quite an uplifting fact. ◆

Customer Satisfaction Is the Most Important Thing

THE FUTURE OF THE TELECOMMUNICATIONS INDUSTRY

Address by IVAN SEIDENBERG, Chairman and CEO, Verizon

Delivered to the Cellular Telecommunications Industry Association (CTIA) Annual Conference, Las Vegas, Nevada, April 1, 2009

Introduction by Steve Largent, President and CEO of CTIA.

Thank you, Steve, and good morning, everybody. It's great to be here at CTIA and feel the energy fueling this convention and this industry. As a matter of fact, I wish everybody in America could be here to taste the wireless "special sauce" because—in an economy that seems to have forgotten how to grow—the mobile industry keeps reminding us.

You grow by investing in infrastructure that drives the global economy forward.

You grow by innovating around new products, services and applications that expand the market and excite customers.

Most important, you grow by doing what CTIA companies do best: focusing on customers, expanding our value proposition, and enmeshing wireless ever more deeply into the fabric of customers' lives.

As the theme of this conference indicates, the word "mobile" doesn't just describe a technology any more … it describes a way of life. Wireless devices have become the world's most ubiquitous phones and computers and a third screen for video and multimedia. Three-quarters of the world's digital messages in January were sent over a mobile device, making wireless the glue that binds our texting and twittering society together. Going forward, the next wave of innovation will embed mobile connections into the core of our lives, making wireless connectivity part of everything we touch.

Everybody in this room believes in this vision. Here in the U.S., wireless companies invested well over $20 billion last year to make it a reality—more than was invested in semiconductors, airlines, or railroads. Our partners and suppliers invested billions more to develop the handsets, applications, network components, chips, batteries, operating systems and software to deliver it to customers.

The result is a vibrant, $800-billion-dollar global industry -- full of new products, new applications and new entrants. Customer satisfaction is on the rise. Innovation and competition are thriving. And a new business model is emerging that will make the next 25 years of wireless growth every bit as dynamic as the first 25 years—an outcome that will be hugely important for our country as well as our industry.

To get us in the right mind-set about the expanding universe for wireless, I'm going to start by giving you my "Cliff's Notes" history of the communications business. Ready?

In the beginning was the phone.

It worked by connecting one place to another place. The way we measured growth in the traditional phone business was to count the number of households and businesses connected to the network, which put our addressable market in the millions. Under the traditional telephone model, we grew by adding lines. Today, we grow by adding value—specifically, by amping up the power and speed of the landline connection to deliver broadband, video and IP services. We're big believers in broadband, and we've invested in that belief to transform the old analog model and re-invent our landline business for the digital era.

Next came the wireless phone. Instead of connecting places, the mobile phone connects people. With wireless, our universe expands to include the whole population … hundreds of millions here in the U.S., several billion worldwide. Under this model, we grow by adding and keeping customers. This has and will continue to serve us well, especially as more and more experiences move to the wireless platform.

Here's one way to think about it. According to the latest Nielsen reports, the average American spends a little over 5 hours a day watching television and another hour a day surfing the Internet. On the other hand, U.S. wireless customers in 2008 use their phones an average of 26 minutes a day.

Less than half an hour on the wireless side … more than six hours on the TV and Internet side.

If we can get even a modest amount of that usage to migrate to mobile, we have lots of headroom to grow.

We know the demand for mobile Internet and video services is there. Generally, data already accounts for more than one-quarter of our service revenues. A recent survey says that more than 70 percent of wireless users expect to increase their use of mobile devices over the next couple of years for such things as Internet access, photo sharing, music and social networking. Sales of smart phones are growing by 30 percent a year, and the Consumer Electronics Association estimates they'll account for one of every three handset sales by 2011. And just think what will happen when we start using smart phones for the really big things like education, energy conservation and health care.

Now wireless is about to enter a new era, where wireless will connect everything: not just people-to-people, but also people-to-machine and machine-to-machine. In this model, there is literally no limit on the number of connections that can be part of the mobile grid: cars, appliances, buildings, roads, sensors, medical monitors, someday even inventories on supermarket shelves … all of these have the potential to become inherently intelligent, perpetually connected nodes on the mobile web.

Why is this significant? Because it challenges the conventional wisdom about the growth potential of the wireless industry.

Call it the "100 percent" ceiling—the idea that 100 percent penetration of the population is the upper limit of growth for an industry. Countries like Sweden and Italy have shown that you can go beyond 100 percent even in today's wireless business model, as customers start to use more than one mobile device. That's happening here in America, too, as we keep going past 90 percent penetration to 100 percent and more.

But even that's too limiting a view of the future; if we think in terms of the complex web of wireless connectivity that next-generation technology will bring about, then the opportunity to explode past the 100 percent ceiling to 300 percent, 400 percent, or 500 percent is not only possible … it's probable.

Our industry has witnessed this dynamic relationship between bandwidth and demand before. For example, in 2002, we began deploying a 2G network. Since then, data traffic on the 2G network has increased by 300 percent. When we introduced 3G in 2004, we increased wireless data speeds by a factor of 10 … and saw data traffic multiply by more than 10 times. As we make the move to 4G, network speeds will increase by another 8-10 times, which we think will drive another exponential increase in data. In fact, our Verizon Wireless visionaries tell me that we can expect orders of magnitude increases in traffic on our 4G network in just the next couple of years.

That's the growth dynamic that's driving our technology plans, and that's the new industry model we're building our future on. At Verizon, we have several initiatives under way to help take our industry to the next level of growth.

First, we will deploy fourth-generation technology based on the Long-term Evolution, or LTE, standard throughout our wireless infrastructure. We think LTE has several advantages that will speed the transition to a truly globalized mobile broadband experience. It will deliver up to 10 times the capacity of today's technology, which will open the possibilities for streaming video, videoconferencing, 3-D maps and graphics, and more. It's quickly emerging as the global standard: according to one trade group, some 26 network operators around the world have committed to the LTE standard, which means we will be able to quickly amass the scale developers need to design products and services for LTE customers.

The speed, reliability and capacity of 4G networks will take today's online experiences to a whole new level. Social networking will be enhanced by location services and 3-D graphics. TVs, PCs and mobile devices will be able to interact, share applications and move content seamlessly among different environments. And wireless will become so deeply embedded into the fabric of our world that it'll seem less like a "product" and more like an extension of our thoughts and lives.

We're moving fast to get to 4G. We've selected the key infrastructure partners who will help us build the LTE network. Working with Vodafone, we've completed the market trials and standards work. We will begin deployment later this year with a few commercially-ready markets and will roll it out to 25 or 30 markets in 2010, with the expectation of faster roll-out thereafter.

Of course, infrastructure is just one piece of the puzzle. It's the combination of devices, applications and network capabilities that will really cause this market to take off. No single company—whether you're a network provider, a manufacturer, a software company or anybody else—will be able to envision, let alone provide every aspect of this whole 4G ecosystem on its own. That's why we're working with partners, entrepreneurs and inventors from across the industry to create the next-generation products and services that will release the full power and potential of our network for customers.

At the end of 2007, we announced our Open Development program—a process for certifying new wireless devices, software and applications to run on our networks. By July of '08, the first device was certified and ready to go on our network: an inventory-management device that lets suppliers know when their materials get too low. About a month ago, we certified a "smart grid" technology that utilities can use to read meters and manage energy more efficiently. And most recently, we approved our first health-care device: a wireless tablet that nurses, doctors and lab technicians can use as a portable medical chart for accessing patient records, entering vital signs and managing medicines—all at the patient's bedside.

All in all, we've certified 36 devices through this new commercial model, with more in the pipeline. We expect this process to really rev up as we deploy 4G, which we see as the on-ramp for all the innovation that, up to now, has been focused on the desktop but which will now be able to migrate to the wireless environment.

In another initiative designed to fill up the LTE pipeline, we plan to launch the Verizon Wireless LTE Innovation Center later this year as an incubator for new products in the areas of consumer electronics, telematics and machine-to-machine products for health care, security and utility metering. Working with our partners, Ericsson and Alcatel-Lucent, we'll provide an environment for testing, prototyping, trialing new LTE products and concepts—giving innovators the tools they need to develop creative solutions for connecting people, places and things.

We're also joining with some of the world's biggest mobile operators in creating a global community for innovation on the applications side. About a year ago, Vodafone, SoftBank and China Mobile formed a Joint Innovation Laboratory to speed the development of mobile widgets and other content. Verizon plans to join in that effort. Together, our companies represent 1 billion customers worldwide. That critical mass of customers will accelerate this market to the tipping point and make these useful applications widely available across any device, any handset, anywhere around the world.

This is a tremendously fertile moment in the life of the wireless industry. You just have to walk around the convention floor here at CTIA to see the fantastic competitive drive that's pushing the technology forward and creating new choices for customers.

But as you know, we can have the best networks, the best products, and the best intentions in the world and still get derailed by issues that put stones in our path and trip us up on our race to the future. We can't afford … and frankly, our country can't afford … to slow down our growth momentum. That's why it's critical for everyone who touches this industry to come together, focus on some common issues, and rally around some creative solutions that will create value for customers and opportunity across the whole industry.

The first challenge has to do with compatibility and standards. If you think about the PC world, the explosion of growth and innovation happened when the computer industry coalesced around a handful of operating systems, which standardized the environment for application development. The market is pressing the wireless industry toward openness and compatibility as well. LTE's global standards are a big step in that direction, but we still have lots of different operating systems competing for supremacy. The sooner we come together around an open, interoperable environment for development, the faster we'll innovate and the sooner we'll provide the seamless interface across all technology platforms that customers are looking for.

We also have to ensure that we maintain the proinvestment, competitive environment that has been so vital to the growth of this industry. I'm sure all of us understand the pressures that policy-makers face in an era of big deficits and slow growth. But we need to be very careful that government does not to try to fix short-term needs at the expense of long-term growth, which happens every time it raises taxes or imposes new regulations. I'll mention just two cases in point:

- Taxes on wireless services in the period from 2003-2007 rose four times faster than for other goods and services. Five states have effective tax rates that exceed 15 percent. Our industry needs to unite behind the Cell Phone Tax Moratorium that would give us a 5-year period to work with state and federal authorities on a solution to these excessive and discriminatory rates.
- We also need to remove roadblocks that stand in the way of capital investment. For example, everybody from the White House to state capitols to local authorities wants to speed the deployment of broadband to rural areas. As we know, wireless can be a big part of that effort. For that to happen, we need to build more cell towers and add new antennas—a process that can often take more than a year due to local zoning delays. The CTIA has asked the FCC to expedite this process by imposing a reasonable "shot clock" for getting these approvals. Our industry can be part of the solution to bringing the wonder of wireless broadband to communities across America—but first, we need to take down some of these unnecessary obstacles to investment.

Wireless consumers have benefited from federal policies that have promoted competition in the wireless industry. Continuing to build on that national framework for wireless regulation is good for consumers and the industry. Having said that, the only way we earn the regulatory freedom we need to run our businesses is by maintaining the relentless customer focus that has historically characterized the wireless industry.

We've done a good job with this in recent years. Customer satisfaction with wireless is on the rise, largely because our industry has worked diligently to improve call quality, customer choice, contract language and so forth. Even Consumer Reports—one of our harshest critics for many years—said recently that wireless customer satisfaction is "surging." That's a huge turnaround on the part of Consumers Union and a great acknowledgement of the good things happening in our industry.

But when it comes to meeting customer needs, there's always more work to do.

Going forward, we need to continue to be even clearer and more transparent when it comes to disclosure of our practices, products and policies. We need to be even more vigilant about protecting the privacy of customer information in an increasingly interconnected world. We need to work even harder to ensure that our products and services are making customers' digital lives more secure. And we need to continue to show that competitive companies duking it out in the marketplace produce satisfied customers and a healthy, innovative industry.

Finally, it's time for us to use the technological resources of the wireless industry to ensure our national security and public safety by creating a 21st-century communications system for first-responders. The key is to give public safety agencies the spectrum they need to meet their current and future needs—and, eight years out from 9/11, we cannot afford to wade through another round of auctions and redundant network construction to get there. Fortunately, there's another answer: assigning the D-block spectrum directly to state and local public safety agencies, then letting them work with local network providers to create the robust, interoperable system this country needs.

It's time we came together and saw this as the national security imperative it is.

The sooner the leaders of this industry come together to address these challenges and solve problems for customers, the sooner we'll reach the tipping point that will unleash the next wave of wireless growth. The benefits—for our industry and for our society—will be profound.

How big are we talking? The latest study done for CTIA says the productivity improvements over the next ten years just from the wireless services that exist today will amount to $860 billion.

I'm confident that we will prove that estimate to be conservative.

The revolutionary wireless services on the horizon will be hugely important in the lives of our customers and communities. As we harness the full innovative power of our industry, we will provide a brand new set of tools for addressing the major social issues of our time:

- Improving public safety by ensuring that first-responders can communicate with each other seamlessly and in full HD clarity;
- Making businesses more productive by giving them better tools to monitor their inventory, manage their sales forces and interface with their customers;
- Saving energy by embedding smart technologies into utility grids, highways, bridges and buildings;
- Improving the quality and reducing the cost of health care with wireless devices that help patients check glucose levels, let children monitor the safety of their elderly parents, and bring medical records into the 21st century;
- And using wireless broadband to expand the opportunities of the digital era across our society—not

just here in the U.S., but around the world.

I do not mean to minimize the challenges we face—as an industry or a country—as we try to get our economy going again. But we all know that wireless innovation has been a foundation of our country's prosperity for the last 25 years, and I'm confident that this great and vibrant industry will continue to be a leader as we put our economy back on the path to growth.

That's why—for all our challenges—we are a fortunate industry.

Our products and services are indispensable to our customers' lives.

Our infrastructure is an on-ramp to innovation for the whole technology sector.

And we have only just begun to show how our technology can make our society more productive, more equitable and richer with possibility.

Verizon is proud to be part of this vigorous and vital industry, and we look forward to working with all of you to unleash our full potential for the benefit of our customers, our communities, our country and our world.

Thank you, and have a great conference. ◆

Life After Liquidation of the Fourth Estate

THE NEWS MEDIA IS ON A COLLISION COURSE OF BIG GOVERNMENT

Address by JOSEPH P. DUGGAN, Visiting Professor in Politics and Communication at Tecnológico de Monterrey, Campus Estado de México, former newspaper editor and White House speechwriter

Delivered to students of communication and international relations, Tec de Monterrey - Campus Estado de Mexico, Mexico City, Mexico, April 3, 2009

Visiting Mexico these days gives me a feeling of being a time traveler, or one of those characters in science fiction who stumbles into a parallel universe. Let me explain.

Last November I spent a very enjoyable week lecturing at another university in discussion with very bright young students in another part of Mexico—"en la provincia," as I often hear Mexico City people describe any part of this great nation more than 50 kilometers from your viceregal, heliocentric metropolis. I am not exaggerating. When I met some academicians in Mexico City a few days later—none of them from Tec de Monterrey, by the way—I encountered these sorts of remarks:

"Really? You went there? In the provinces? What do they know?"

Well, like Henry Morton Stanley returning from the Congo, I can report to you breathlessly that the younger people in the provinces, availing themselves of the latest global electronic media, know more or less the same as do you young people in the capital, or as young people in countries far away.

But what about the grown-ups?

When I was in the smaller town, I had the honor of meeting the owner of a group of newspapers in that locality. This man was very comfortable, wrapped up in his cloud of prosperity. When I learned what his livelihood entailed I had an urgent impulse to warn him that printed newspapers were doomed as a profitable enterprise. I felt like one of the weather forecasters who tried to sound the alarm for people to get out of New Orleans—whose tourism motto used to be "The City that Care Forgot", before Hurricane Katrina hit, but the newspaper owner seemed to regard me as something like one of those long-bearded madmen roaming the streets and shouting that the Apocalypse is at hand.

I could understand why he was not worried.

I was born and raised in St. Louis, Missouri, on banks of the Mississippi River about 900 kilometers upstream from New Orleans. Our civil engineers and politicians have fortified the city with levees and floodwalls. The citizens are assured that they should consider themselves as good as invulnerable because the public works are designed to withstand anything short of what is known as a "500-year flood."

Well, in today's media environment, we are awash in a 500-year flood. If you read the novel, The Wild Palms, by William Faulkner, you'll get some feel for a 500-year flood on the Mississippi.

My sense of being a time traveler that day in the smaller Mexican town was compounded by what was treated as the big news in the local paper. Dominating both the "main" front page and the front of the local section was lavish coverage, in color photography and laudatory prose, of the opening of a grand new Liverpool department store. The Governor of the State cut the ceremonial ribbon. The wives of the wealthy were dressed to the nines.

Have you ever had a very, very bad dream and wanted to scream in your sleep? I had that same urgent sense that something was terribly wrong with this picture. I had an intimation of the Father of Waters about to smash through the levee. Except for the 21st century couture, the Liverpool opening was totally retro -- like a scene from the 1950s. That was when, in the United States, department stores dominated retail shopping, and department stores and daily newspapers were in a symbiosis—each depending on page after page of display advertising the stores paid for and the newspapers printed and delivered.

Big general department stores like Liverpool are a vanishing species in the United States. There are specialized stores instead, and a growing market share for e-commerce. In any case, daily newspapers are not the preferred advertising medium even for the remaining brick-and-mortar stores. Web sites are the way to go.

The last surviving generation of daily newspapers in the United States outlasted the disappearance of retail display advertising by squeezing as much profit as possible out of classified advertising. The model of classified advertising perhaps induced many publishers to deceive themselves into thinking they could profit on the Internet through "micropayments."

But along came a software engineer in San Francisco named Craig Newmark. In 1993 he began a series of emails to friends and acquaintances to let them share information on things they wanted to buy or sell. He moved his "Craigslist" to the web in 1995. It is something of a cooperative, cost-free to the user. Why pay a newspaper for a classified ad when you can get more effective results for free? Craigslist knocked the last prop out from under the newspaper business.

I tried to warn the provincial newspaper owner that the End is Near, but he contentedly replied that the Internet doesn't have much penetration in his market, yet.

Yet.

In December the Chicago Tribune—which in its glory days made governors and presidents tremble and called itself "The World's Greatest Newspaper" -- filed for bankruptcy. This week the other Chicago daily, the Sun-Times, filed for bankruptcy. There is a death watch taking place in the United States, waiting to spot the first major metropolitan area to become bereft of even a single daily newspaper. All of this is happening more by accident than by design. When he ignited the conflagration that is swallowing the Chicago newspapers, Craig Newmark was no more aware of the consequences than Mrs. O'Leary's cow when she kicked off the Great Chicago Fire of the 19th century.

I went online today and noticed that Craigslist is now operating in Mexico. It is not nearly as robust as it is in the United States—yet -- but there is no reason to believe it will not have the same impact eventually here as it has north of the border.

The implications of the inundation of new media for political communication are huge. Up until recently, one of the doctrines of political communication and indeed most public relations was that "broadcast follows print."

Ghostwriters and press secretaries like me, working for political leaders or corporate executives, endeavored to get definitive statements of their salient "messages" into the news or opinion columns of leading newspapers—for example, "the newspaper of record," The New York Times, or the paper for national political junkies, The Washington Post. I spent some of the most profitable years of my career trying to help clients or candidates by developing and executing strategies that were quite linear: First, "message development," then the "predicate" story or opinion column planted in a leading newspaper. Next, the overwhelming popular resonance of the message through radio and television—optimized by a strenuous effort to maintain "message control." Finally (usually), victory in our legislative or electoral campaign.

Today even the once invincible Times and Post are teetering on the edge of bankruptcy.

With the disappearance of printed newspapers and their reporting and editorial functions, broadcasting no longer will be able to follow print. If you follow fortunes of the media business you will know that broadcasting itself is not much healthier than the mortally ill newspaper business. At the end of the 18th century, Edmund Burke, recalling the demise of France's old regime and its "three estates," is said to have coined the term "Fourth Estate" for the rising, independent power of the press. Today this Fourth Estate we have known since Burke's time is being liquidated.

Not too many years ago when I was a press secretary for a Member of Congress, I helped my boss navigate through the maze of radio and television interviewers who crowded the hall outside the Chamber of the United States Capitol where President Bill Clinton had delivered one of his annual State of the Union addresses. My job was to get my boss interviewed on camera by CBS and FOX and NBC and CNN and as many outlets as possible. I had to deal with reporters and producers and technicians who had sophisticated equipment connecting us with their networks, which employed thousands of people and billions of dollars in capital investment. Afterwards we went back to the office and I helped the Congressman make phone calls to print news reporters. For circumstances that I think you can understand, the live, televised nature of this event reversed the usual pattern of "broadcast follows print."

There was a surreal quality to President Barack Obama's first speech, just a few weeks ago, before a joint session of the United States Congress. While the President spoke from the podium, a number of Members of Congress employed their handheld devices to send Twitter messages to their constituents or anyone else out there in Tweetville who might have been tuning in. The commentary, whether irreverent or too reverent, was childish, undignified—to an old fuddy-duddy like me, absolutely appalling.

But as Ronald Reagan wrote in 1988 in his profoundly realistic National Security Strategy of the United States, we must "deal with the world as it is, not as we might wish it to be."

The genie is out of the bottle. We have arrived at the moment of realization of the prophetic vision of James

Joyce: "Here Comes Everybody."

Both the late Marshall McLuhan and his son Eric, who has lectured here a number of times at Tec de Monterrey, saw James Joyce's weird experimental book, Finnegans Wake, as insightful, visionary, and even prophetic. Most critics seem to agree that the book attempts to express the convoluted jumble of fact, feeling and fantasy that takes place at night in a person's dreams. The McLuhans, plausibly, also see in the book an exposition and projection of how changes in mass media are affecting the relationships in human society. The shadowy protagonist of the book is someone called "H.C.E."—signifying, among other things, "Here Comes Everybody."

The world of H.C.E. is comedy and nightmare rolled into one.

The McLuhans say that electronic media dealt a devastating blow to the alphabetic, linear way of thinking and communicating that had dominated Western society since Gutenberg's invention of moveable type and printing as a mass medium. For five centuries, the Gutenberg technology was turbo-charged by Descartes' extreme rationalist ideology of being and knowing—what the 20th-century philosopher Frederick Wilhelmsen called "modern man's myth of self-identity."

Today, aural and even tactile ways of expression and perception are regaining dominance, as had been the case before the age of print. Radio, as McLuhan said, is a "hot" medium. If you doubt this, consider how during the past two decades talk radio—mostly of a right-wing populist flavor as distinct from intellectual conservatism -- did its part to turn the calm, linear, rationalist politics of the United States of America envisioned by Jefferson and Madison into something hot and tribal—a cacophony of electronic pow-wows for distinct but allied right-wing tribes. The new chairman of the Republican National Committee, Michael Steele, recently said something not sufficiently flattering the Princeps and Shaman of Right-Wing Radio, Rush Limbaugh. This was an unequal contest, and the dust-up between Steele and Limbaugh left the Republican Party organization weaker with its basic constituency and carried Limbaugh's political power to greater heights.

"Conservative," or as I prefer to call it, right-wing talk radio is so powerful a political force in the United States that some left-wing Democrats in Congress are considering legislation to curb its freedom. They want to revive a former policy that inhibited free speech in broadcasting by requiring the allocation of "equal time" for opposing views. Such policies to inhibit the printed word always have been judged unconstitutional in the United States.

(Let me just note that Steele and Limbaugh both call themselves "conservative"—and so do I. I share positions with both men on many political issues. I very uncomfortable with the hot, populist style—but for the moment this is a corner of world as it is, not as I would wish it to be. Or to paraphrase Voltaire, I may not like their style but I'll defend to the death their right to employ it.)

Broadcast radio's days may be numbered anyway. Now all the hierarchies for the distribution of information are breaking down—including radio and television stations and networks -- bringing to fulfillment James Joyce's vision.

Clay Shirky, who studied art at Yale and now is a media consultant and professor at New York University, has a new book on this very phenomenon, called—wouldn't you know -- Here Comes Everybody.

I heartily recommend the writings of the McLuhans and Shirky. Much of this work is available online for no cost. I put great stock in what Shirky says because he has predicted the collapse of newspapers and other big media enterprises with great prescience, defying and prevailing against conventional wisdom. Shirky says that all paper-and-ink publishing, as we have known it as a big profitable industry, a mass medium, is doomed. Marshall McLuhan predicted this too, but noted that products of the printing press, like medieval manuscripts, will survive as art forms. In this regard, I might mention that recently the Benedictine monks of St. John's University of Minnesota commissioned the production of a Bible all made by hand, on vellum and in calligraphy and the gold and powdered lapis and egg tempera of illuminated manuscripts. McLuhan liked to say regarding any technology, "if it works, it's obsolete." But the corollary to this, which he also accepted, is that even if something is obsolete, it still can work.

A year ago I attended a program at the National Press Club in Washington, celebrating the centennials of both the Press Club and the world's first School of Journalism, that of the University of Missouri. One of the morning panel's speakers was Liss Jeffrey of Toronto, who knew Marshall McLuhan and is a careful student of his work. She gave a good exposition of his work, as I know that your professors here at Tec do as well. The luncheon speaker was a very intelligent and accomplished man. He formerly had been the founding editor of the Wall Street Journal Online. After that, he had been the director of Yahoo! News. Now he was about to launch a new venture.

I anticipated his speech as a kind of Holy Grail that was going to reveal, to signify, how the online news media were going to operate profitably. I am certain this is a better man than I am, and I mean him no disrespect whatever. But his speech failed to indicate anything—not one single thing -- about a profitable or even coherent future for online news media. I do not mean in any way to belittle or criticize this man but instead to indicate the magnitude of the maelstrom all of us are in.

Just three weeks ago, on March 13, 2009, Clay Shirky posted a piece on his blog, www.shirky.com, called "Newspapers and Thinking the Unthinkable." He wrote that in revolutions,

The old stuff gets broken faster than the new stuff is put in its place. The importance of any given experiment isn't apparent at the moment it appears; big changes stall, small changes spread. Even the revolutionaries can't predict what will happen.

Shirky also said:

When someone demands to know how we are going to replace newspapers, they are really demanding to be told that we are not living through a revolution. They are demanding to be told that old systems won't break before new systems are in place. They are demanding to be told that ancient social bargains aren't in peril, that core institutions will be spared, that new methods of spreading information will improve previous practice rather than upending it. They are demanding to be lied to.

As Mexicans who will commemorate next year the centennial of the first gunfire of your Revolution, I am sure you can relate to Shirky's remark that "the old stuff gets broken faster than the new stuff is put in its place."

On March 12, Eric McLuhan gave a speech at the Campidoglio in Rome at a program sponsored by the Diocese of Rome, whose bishop, you may know, is better known by his global title, Il Papa, The Pope.

Eric McLuhan sent me his text, which I have given to your professors and asked that they circulate to you. His remarks are quite consistent with Shirky's about our being amid a revolution. But Eric McLuhan adds the hopeful note that this revolution is also a renaissance—the sort of thing that recurs in Western Civilization, like one of those over-the-top Mississippi floods, every four hundred or five hundred years.

Eric McLuhan told his audience, which included the papal Secretary of State, who I hope was listening, this:

Let me suggest that the following six traits characterize renaissances. All can be seen in operation today.

· A renaissance is always invisible to those living through it.

· A renaissance is always a side-effect of something else, some new medium that reshapes perception: in our case, we have the spectrum of electric technologies from the motor to the MP3, from the telegraph to the satellite, the radio to the Internet. The Grand Renaissance married the printing press and the alphabet.

· A renaissance is always accompanied by a revolution in sensibility.

· A renaissance is always announced in and by the arts; artists function as "the antennae of the race."

· A renaissance always serves as the advance phase of a new mode of culture and society, new-fashioned identities all 'round.

· A renaissance is always accompanied by a major war. In our case, we have had World Wars One and Two and the Cold War (among other wars), and now we are embroiled in the first of the Terrorist Wars. At the speed of light, the front is gone, the battleground is the outward globe, and that (much larger) paysage intérieur."

We are at one of those crossroads in human civilization where it is scarcely possible to see any road at all. Everyone knows that corporate executives come and go. Those who know anything about Rupert Murdoch should know he did not get where he is by being a pessimist. Murdoch has been a quintessential, entrepreneurial optimist. About a month ago, the second-in-command of Murdoch's News Corporation announced his voluntary resignation. The world will little note nor long remember who Murdoch's Second Banana was or what he did, but it should take note of what Murdoch said.

Instead of treating the event as a routine transition, Murdoch spoke in almost apocalyptic terms. He said, "We are in the midst of a phase of history in which nations will be redefined and their futures fundamentally altered. Many people will be under extreme pressure and many companies mortally wounded."

That sounds a lot more like Aleksandr Solzhenitsyn than the Rupert Murdoch we all have known and loved—or, as the case may be, feared.

Thomas Merton was a very good literary critic and poet in the United States in the middle of the 20th century. As a young man for a time he wrote daily book reviews of the highest quality for the New York Herald-Tribune and the New York Times. Later he became a Trappist monk and continued writing prolifically after his entry into the silent cloister. Merton composed a prayer that describes the situation of those of us in politics and communication who are aware of our chaotic new environment.

Merton wrote: "My Lord God, I have no idea where I am going. I do not see the road ahead of me. I cannot know for certain where it will end."

Let me remind you that a renaissance is a rebirth, and that birth always involves bleeding and pain, but afterwards the joy of new life.

The World Wide Web provides the world's greatest library and the platform for the world's most complex and far-reaching, yet potentially intimate, communications. These are resources for our renaissance. That is why I join the McLuhans in urging that you—that we—as seekers and learners go back to the classical tradition of understanding as "grammarians." Sixty-five years ago Marshall McLuhan in his doctoral dissertation on the classical Trivium of grammar, dialectics, and rhetoric, deplored the Cartesian imbalance of overemphasizing dialectics to the neglect of "grammar." McLuhan explained, "The grammarian is concerned with connections; the dialectician with divisions." And he said, "Grammarians distrusted abstraction; dialecticians distrusted concrete modes of language."

What does this mean in terms of politics and international relations? Of these grammarians and dialecticians, did McLuhan name names? Yes. He said Cicero—a proponent of the natural law -- was perhaps the greatest grammarian. Machiavelli was a "consciously anti-Ciceronian" dialectician. In the intelligence profession, the grammar of the Trivium is known as pattern recognition. The great book by Adda B. Bozeman, Politics and Culture in International History, is used extensively by the more intelligent intelligence professionals and other adherents of realism in world politics. The book is a grand quest for understanding; it is the work of an encyclopedic grammarian.

News media enterprises today are subject to market forces and are facing consequences—the destruction of many recently prosperous enterprises and types of enterprises.

The modern nation-states—and the supranational organizations like the United Nations -- are stiflingly bureaucratic. They are less subject to market forces than are businesses, and in reaction to the current economic panic—a crisis of abundance, not of scarcity—the big governmental and intergovernmental bureaucracies are opportunistically seizing more power. The bureaucracies have a shifting parasite-host relationship with the social engineer, the "development professional," and other terms for the type of soulless technocrat whom the late Samuel Huntington called "Davos Man" and Frederick Wilhelmsen called "the egomaniac, lusting gnostically to dominate all existence." Just contemplate what has been taking place in Washington the past two months, and at the Group of 20 Summit in London this week, where Chinese totalitarians, Russian authoritarians, cosmopolitan eugenicists, and Western "democratic" socialists are straining to stitch together a Frankenstein monster from the jumble of formaldehyde jars holding the maimed remains of capitalism. In 1945, C.S. Lewis wrote a novel envisioning the death-over-life power of today's gnostic technocratic bureaucracy; he called it That Hideous Strength. It is the fictional companion to Lewis's famous treatise, The Abolition of Man.

Marshall McLuhan's very first published article appeared when he was a 25-year-old graduate student. The article was about a writer whom young McLuhan admired, G.K. Chesterton. The year was 1936, a moment when Big Government statism was in vogue from Washington to Berlin to Rome to London to Moscow. McLuhan praised Chesterton's "inspiriting opposition to the spread of officialdom and bureaucracy." He called Chesterton "a revolutionary, not because he finds everything equally detestable, but because he fears lest certain infinitely valuable things, such as the family and personal liberty, should vanish."

The new media are on a collision course with Big Government. They are not immune from gnosticism, but they are inherently anti-bureaucratic. They will serve us and serve our freedom if we understand them, and if we understand ourselves. We can and should make the new media our instruments, our allies, in recovering and strengthening infinitely valuable things such as the family and personal liberty. I am sure that Marshall McLuhan, a man of deep faith as well as insight into our human and earthly ecology, would have shared the sentiment of conclusion of Merton's prayer:

"I will not fear, for You are ever with me, and You will never leave me to face my perils alone." ◆

The Future of the U.S. ICBM

UNTIL THERE IS COMPLETE PEACE WE MUST MAINTAIN A NUCLEAR ARSENAL

Address by JOHN CLAY, Vice President, Missile Systems, Strike and Surveillance Systems Division, Northrop Grumman Aerospace Systems

Delivered to the National Institute for Public Policy, "The Role of America's Land-Based Strategic Forces in the 21st Century," Washington, D.C., April 22, 2009

I want to thank the conference organizers for giving me this opportunity to discuss the future of our nation's ICBM force. This is a critical issue. Yet it is one little debated here in Washington, or even well understood.

Very few Americans appreciate the progress that has been made in arms control. Few know that our ICBM force has been reduced to the levels of the Eisenhower Administration.

In the relaxed environment after the end of the Cold War, it was only natural, I suppose, that policymakers would turn their attention away from strategic issues. Over the years, the ICBM program became the least fashionable element of this suddenly unfashionable subject.

Now, as a new administration begins to work through the next iteration of the Nuclear Posture Review, the ICBM force is sure to come under renewed scrutiny. I can expect that the authors of the Nuclear Posture Review will consider four options when it comes to ICBMs:

Retire them —
Reduce them —
Replace them —
Or maintain them —

When the Obama Administration writes its NPR, however, it will do so in a world far from the relaxed environment of the immediate post-Cold War era. So let me examine these four options in light of recent developments.

The **first option** is retire them: Do we need an ICBM force?

A Washington-based think tank, known to be close to some of the president's advisors, released a report questioning whether all three legs of the triad are needed, especially the air and land legs.(1)

As the United States heads toward fulfilling the terms of the Moscow Treaty—reducing U.S. operational warheads to a limit of 1,700 to 2,200—I can understand why scrapping the land leg seems thinkable to some.

After all, we have already taken many of our systems out of service—including the Peacekeeper ICBM, half of our Minutemen, and a number of ballistic missile submarines. Our B-1 heavy bombers and four Trident submarines no longer have nuclear missions.

Do we really need, then, the remaining 450 Minutemen IIIs to keep America safe?

I believe that when the administration takes a hard look at this question, it will conclude—as have ten previous presidents—that each leg of the triad is vital; and that the land leg is critical to maintaining a stabilizing deterrent.

Stability is the goal. We've all followed the dramatic news in North Korea, Iran and an increasingly unstable Pakistan.

Then there are developments taking place among the great powers.

While dramatic reductions have been achieved with Russia, Moscow is scaling up the modernization of its nuclear forces, including a MIRVed ICBM and a new maneuverable warhead.

Moscow has also changed its strategic doctrine, adopting the lowest threshold for first-use of any nuclear power.

Then there is China, with ten types of ballistic missile systems either operational or under development.(2)

A DoD report late last year concluded: "The newly self-confident and economically vibrant China is modernizing and increasing its nuclear forces . . . Given these developments in both Russia and China, our allies in Europe and Asia understandably require reassuring."(3) This, of course, is what we refer to as "extended deterrence."

There may be good diplomatic reasons why the large-scale forces of Russia and the United States — the only forces in which warheads and missiles are counted in the thousands — are the only two parties in arms control. It may be time to ask, however, if China should forever remain excluded.

After all, China's nuclear weight has vastly increased. China, as well as Russia, has an ability to destroy our three bomber and two submarine bases. And there is always the non-zero risk that somehow, someone will discover a way to make the seas transparent. With 450 Minuteman III ICBMs, no enemy could conceivably mount such a cheap attack.

Why is this?

As we draw down our nuclear forces, the character of our remaining forces will be more important than the actual warhead numbers. Our strategic triad complicates an enemy's first-strike capability to the point of near-impossibility.

Even if an adversary were 90 percent effective with a one-on-one attack—and that is a very generous assumption, given uncertainties of reliability, fratricide, and willingness of the US President to ride it out—the adversary would still have 45 Minutemen to contend with. That is not a very attractive position for any national leader.

Because our land-based deterrent is different from the other two legs, it complicates the synchronicity of a first-strike. It insures that such a first-strike attack on the United States would be a suicide move.

Seen in this light, our ICBM force is a very stabilizing deterrent.

Now, this message has been a hard sell in some quarters. Some observers have, I think, a hangover disdain from the Peacekeeper, which had up to ten MIRVed warheads, making it a potentially tempting target.

Yet our existing U.S. ICBM force, as you know, is on the track to be completely "de-MIRVed." It is no longer the "use-it-or-lose-it" target that was a staple of so much Cold War fiction. Additionally, Minuteman's short time of execution reduces the urgency for our president to decide quickly on the appropriate response.

The U.S. land-leg deterrent offers a stabilizing element in an increasingly unstable world. So discarding the ICBM is not, in my opinion, either a responsible or a realistic option for now.

What, then, about **the second option**, to reduce our ICBM force?

By 2010, the United States will have reached the Moscow Treaty limits—a two-thirds reduction of our deployed nuclear force levels from about eight years ago. In a world of emergent threats, will it be prudent to cut beyond that?

After all, if we cut our force, considerations of cost and logistical support would suggest a need to go beyond eliminating a 50-missile squadron. Rather, economic logic would dictate giving up an entire missile wing—150 launchers—and closing one of the bases. That would mean a 33 percent reduction in our already depleted ICBM force.

Again, is this prudent?

Remember that as we have cut our strategic forces, we have also given greater weight to their use as an incentive against proliferation. Recent policy now also contemplates retaliation for biological or chemical attacks against a growing list of possible actors. Another consideration is the ability to maintain a critical mass of AF and industry expertise. At some point as the ICBM force becomes smaller, retaining the skills, industrial capabilities, and high-levels of process integrity becomes impractical. It is going to become quite difficult to continue to expand the missions for a salami-sliced arsenal.

If the administration does decide to cut our strategic triad, our land-based ICBM force—reduced by 82 percent just since 1990—should be the last place to cut. Otherwise, we would risk seriously unbalancing our triad. If cuts are to be made, perhaps it would be worth considering focusing first on reductions in the weapons loads of the other legs. In this same spirit, we might consider reducing stockpiled weapons rather than taking most or all of any agreed negotiations from the pool of stationed weapons.

Or perhaps we may not want to make any further cuts at all. Perhaps we might want to dwell at this safe plateau until we have a better sense of the future.

On this point, let me quote Secretary Robert Gates, who said:

"Who can tell what the world will look like in 10 to 20 years? As someone who spent most of his career in the intelligence business, I can assure you that our track record for long-term guesswork hasn't been all that great. We have to know our limitations. We have to acknowledge that the fundamental nature of man hasn't changed—and that our adversaries and other nations will always seek whatever advantages they can find. Knowing that, we have to be prepared for contingencies we haven't even considered."

The **third option**, is replacing the Minuteman III with a new ICBM.

For we missileers and engineers, this is an exciting path.

However, to this option, we missileers and engineers also need to get real.

By that, I mean get real about the budget. Our defense budget is facing huge future constraints. The last ICBM cost $100 billion, in current dollars. By comparison, extending Minuteman to 2030 required an $8 billion and similar life extensions can be repeated indefinitely as I will explain later.

I would also have to say, get real about the politics.

Recent sessions of Congress have said "no" to the Robust Nuclear Earth Penetrator

— said "no" to the conversion of the Trident to conventional uses

— said "no" to the Reliable Replacement Warhead

— said "no" to building a modern pit production facility.

Could anyone look at this political environment and realistically suggest $100 billion for a new ICBM?

As stiff as the challenges would be, a replacement campaign would also have to get real about local politics. Communities are not only comfortable with the legacy Minuteman, they champion it with patriotic pride. They know that in this time of base closures, the Minuteman is a continuing rationale for Air Force bases in their states and that the economic benefits are considerable.

A new missile, however, would face stiff local NIMBY-ism. At a time when it is all but impossible to build a new oil refinery, it would be difficult, if not impossible, to base a new nuclear weapons system. "Exhibit One" is the challenge faced by the Peacekeeker program in the 1980s. After years of studying dozens of basing options, the compromise option was to deploy it in none other than the Minuteman silos.

Moreover, what would a new missile offer by way of deterrence that the Minuteman III force does not offer? What would the customer want a missile to do that the Minuteman III doesn't do today? With modest investment, Minuteman can add accuracy, range, maneuverability, and other new capabilities. However, the warfighter is not asking for these – the warfighters' priorities we hear are robust force security and reducing the cost of ownership.

If, despite all of these obstacles, our answer is still to proceed with a new ICBM, then we had better get going now. As you can see here, it might take to close to 2030 to fully replace Minuteman III. If you look at the example of the Peacekeeper, it took 16 years to develop, test and field them.

We should never dismiss the idea of a new missile. The threat environment could change or an unanticipated opportunity could materialize, such as a joint Air Force-Navy missile. However, it is very possible that if we attempted to replace our Minuteman IIIs, they would ultimately never really be replaced.

This leads me to the **fourth option**—extend Minuteman III beyond 2030.

To understand extension, consider that while the Minuteman program has its origins in the 1970s, these are hardly 1970s missiles in our silos today.

How can that be?

There is an old problem in Greek philosophy called the Ship of Theseus. Plutarch reported that Athenians had lovingly maintained a old war ship with thirty oars. Over time, water and worms wore down every plank and oar. Year by year, the components of the ship were switched by fresh timber, until every square inch of the ship was replaced.

So was it the same ship, or a new one?

I'll leave the answer to students of philosophy. I just know that like the ship of this legend, the Minuteman of today retains its original design with a mix of original and, where aging has necessitated, new subsystems and components.

For example, every one of the 5,000 parts of the Minuteman's gyro stabilized platform can be re-manufactured and many have already been replaced. Although repoured multiple times, Minuteman rocket motors retain their original design, which has never failed in almost 200 test launches. The Air Force is currently refitting the re-entry system and replacing the cryptology. And these are just a few life extension examples.

How is this workable? Simple, the engineers must honor the interfaces between the missile subsystems – the connectors, electrical signals, mass properties, and bolt patterns. The result is a Minuteman III that remains a highly reliable and credible deterrent as demonstrated in ground and flight testing. There is no technical reason why Minuteman III extension cannot continue indefinitely.

As the Air Force embraces its renewed focus on the nuclear enterprise—as the Obama administration reaches out to build an enduring peace—the Minuteman can serve as a highly credible deterrent that is stabilizing, secure, responsive, flexible, and highly affordable.

It will continue to deter potential enemies, dissuade potential nuclear states and assure allies that our nuclear capabilities are credible.

And what about the future?

President Obama now enunciates the same goal that Ronald Reagan once proclaimed—a desire to rid the earth of all weapons of mass destruction. I don't know if a verifiable, global deal to zero is possible. If it is, this is a piece of business we would all be glad to lose.

If I may again quote Secretary Gates, I will let him have the final word.

Robert Gates said that he worked for three Cold War presidents—Jimmy Carter, Ronald Reagan, and George H.W. Bush—who all genuinely wanted to eliminate all nuclear weapons.

"More recently," Secretary Gates noted, "George Shultz, William Perry, Henry Kissinger, and Sam Nunn echoed that sentiment in *The Wall Street Journal*. But all have come up against the reality that as long as others have nuclear weapons, we must maintain some level of these weapons ourselves: to deter potential adversaries and to reassure over two dozen allies and partners who rely on our nuclear umbrella for our security—making it unnecessary for them to develop their own."

I am hopeful that there will one day be no nuclear weapons.

Until that day comes, however, we have the Minuteman III as the means to ensure that the world continues to head in the right direction. ◆

Improving Financial Stability

WE MUST RELY ON SOUND POLICYMAKING

Address by CHARLES I. PLOSSER, President and CEO, Federal Reserve Bank of Philadelphia

Delivered to the Distinguished Speaker Series, University of Chicago, Chicago, Illinois, March 31, 2009

It is a pleasure to be back in Chicago, where I spent a great deal of time long ago learning the value of economics as a central framework for analyzing both business and public policy issues. Today I want to discuss several principles that I believe are essential for sound and effective central banking. In particular, I will outline how these principles provide guidance for some of the key regulatory and supervisory challenges that we must address in the wake of the financial turmoil over the last 18 months.

▸ Principles for Sound Central Banking

The four principles I will stress today recognize the importance of expectations in understanding economic behavior. This has been one of the most significant developments in economic theory during the last four decades, and much of this work was pioneered here at the University of Chicago. In particular, research has shown that expectations about future actions by policymakers play an important role in the economic decisions of a wide array of decisions made by businesses and households. Will Congress raise or lower taxes in the future? Will these taxes be on investment returns or labor income? Will the Federal Reserve ensure that inflation remains low and stable? Expectations about such future policies influence the decisions households and firms make today. Moreover, actions policymakers take today inform the public about the likelihood of future policies.

The recognition of the interaction between policies and expectations is the basis of four principles for sound central banking.

- First, policymakers should set clear objectives that are realistic and feasible. Policymakers and the public must have a clear understanding about what policy can and cannot do. We must take care to set reasonable expectations, because overpromising can erode the credibility of a central bank's commitment to meet any of its goals.
- Second, policymakers must make a credible commitment to conducting policy in a systematic way over time, even when it seems expedient to do otherwise. Acting in a consistent way reinforces the public's expectations and earns credibility; failing to do so risks having expectations become unanchored and creating unnecessary economic volatility.
- Third, policymakers must transparently communicate their policies and actions to the public. In a democratic society, it is important that institutions with the delegated authority to act in the public interest be as clear and as transparent as possible

regarding their actions. This transparency increases the policymakers' accountability to the public.
- Fourth, the central bank must be able to pursue its policies independently from the political process and fiscal authority. Independence, however, does not mean that central bankers or other policymakers are not accountable to the public.

Many of you may be familiar with these principles in the context of making sound monetary policy. For example, these principles lead one to take seriously the establishment of a clear objective for inflation; to limit discretion by making credible commitments to conduct policy in a systematic way, such as using a Taylor-like rule; and to be as transparent as possible about the objectives and policy decisions.

Yet, I believe these principles can also improve the effectiveness of the central bank's policies in promoting financial stability.

Of course, before we set clear and explicit objectives for financial stability, we first must be clear about what we mean by financial stability. Policymakers cannot and should not try to prevent all types of financial instability. Indeed, the economy benefits when financial institutions and markets take on and manage risk. That means inevitably some firms will fail. As my friend the economist Allan Meltzer has said, "Capitalism without failure is like religion without sin. It doesn't work." Our goal should not be to try to prevent every failure, but rather to reduce the systemic risks to the financial system that a failure may create.

For my purposes today, I want to discuss how these principles can help improve policymaking in three areas related to this financial crisis. These areas include managing the central bank's role as lender of last resort, dealing with firms that are too big to fail, and determining the Federal Reserve's future role in promoting financial stability.

▸ Lender of Last Resort Policy

The recent crisis has once again highlighted the important role a central bank can play in promoting financial stability by acting as the lender of last resort. In the 1873 classic *Lombard Street*, Walter Bagehot wrote that central banks could limit systemic risks arising in banking crises by lending freely to solvent banks at a penalty rate against good collateral. The idea was to ensure the availability of liquidity to solvent institutions in a crisis.

I believe that this is still a good principle. Yet, the financial markets look much different today than they did 136 years ago. Today, nonbank financial institutions also play a critical role in financial intermediation and are subject to runs and other forms of systemic risk similar to those that banks face. Yet, neither economists nor policymakers have clearly defined the dimensions of appropriate lending policies in this more complex environment.

Indeed, to address the systemic risk that has arisen since mid-2007, the Fed has greatly expanded its role as lender of last resort. The Fed has expanded its existing discount window operations and created an alphabet soup of new lending facilities to help the credit markets function more effectively. Some of these actions required the Fed to invoke a special provision of the Federal Reserve Act — referred to as Section 13(3)— that gives the Fed the authority to lend to any individual, partnership, or corporation in "unusual and exigent circumstances." In the case of both discount window and 13(3) lending, the law requires that the Fed lend only against good collateral. This tends to limit our lending to solvent but illiquid institutions and would generally prohibit Fed lending to keep insolvent institutions from failing.

During this financial crisis, we have made loans to primary securities dealers, investment banks, a global insurance company, and to industrial and financial companies that issue commercial paper. These lending arrangements have been for terms of as long as 90 days in general, but even as long as 10 years in the case of the financing provided in the Bear Stearns acquisition. Yet we have not articulated guidelines that govern these decisions.

I believe we must develop much clearer criteria under which the Fed will lend to banks or nonbank financial institutions, because the lack of clarity about the purposes of our lending programs and their criteria has added uncertainty and volatility to the markets. We need to clarify under what circumstances, if any, the Fed would lend to insolvent institutions, how insolvency would be determined, and what types of limits, if any, would apply to such lending.

I believe the Fed also needs to impose some order on the application of its Section 13(3) authority. The mere act of creating the Fed's special lending programs has created moral hazard. Intervening too often or expanding too broadly the set of institutions that have access to the central bank's credit facilities can distort the market mechanism for allocating credit and thereby increase the probability and severity of a future financial crisis. Clarifying the criteria under which we will intervene in markets or extend credit, including defining what constitutes "unusual and exigent" circumstances, will be essential if we are to mitigate the moral hazard we have created.

Clear objectives, a systematic approach, and transparency could improve policymaking and policy outcomes for our lending and credit facilities and reduce uncertainty and volatility in the marketplace.

▸ The Problem of Too-Big-to-Fail

While the lender of last resort function is certainly meant to support solvent banks in the event of systemic risks, the current crisis has shown that insolvent institutions that have become too big or too interconnected to fail can pose serious problems for financial stability and for regulators. Due to the complexity and interconnectivity of today's financial markets, problems with one financial institution can spill over to a broad array of other major counterparties. Such contagion may severely disrupt other institutions, their customers, and other markets, thereby posing a threat to the integrity of the entire financial system, ultimately leading to a breakdown of borrowing and lending.

We have also seen that market discipline breaks down when creditors and counterparties believe they are never at risk. The belief that regulators will bail out creditors creates moral hazard that leads to poor risk-taking decisions and undermines the incentives for creditors to monitor these firms. Moreover, it creates incentives for financial firms to become too large or too complex to fail in order to exploit the implicit government guarantees.

At times during the past year, regulators faced the unpalatable choice of either permitting a large financial firm to enter bankruptcy without an adequate resolution mechanism to deal with systemic risks or taking unprecedented actions to preserve the firm to avoid perceived costly disruptions to the financial system. These decisions were complicated by the lack of an up-to-date lending policy that could have allowed the Fed to lend to otherwise solvent counterparties of these failing firms, which might have limited the systemic concerns.

Because the old "rules of the game" were out of date, we had to improvise. Indeed, the financial problems at Bear Stearns, AIG, and Lehman Brothers elicited different responses. But uncertainty about how regulators would handle the next nonbank financial failure added to the stress in the markets.

So what can be done to address the problems posed by insolvent or failing systemically important institutions? I believe we can alleviate much of the uncertainty by following the four principles I've discussed to establish clearer, more predictable procedures for dealing with such situations.

One wrong-headed approach would be to erect a battery of new regulatory restrictions in an attempt to drive the probability of failure to zero. Such an approach would generate large supervisory costs, stifle innovation, and result in regulatory arbitrage as markets worked to evade the regulations. Such regulatory arbitrage was a contributor to the current financial crisis.

So rather than trying to eliminate the risk of failure, the objective should be to reduce the systemic costs of failures, which would enable regulators to allow firms to fail when appropriate. Market participants, believing such failures are possible, would exercise greater market discipline and help prevent financial firms from getting into trouble in the first place.

We must begin with a clear quantifiable definition of systemic risk. Economists have been working on several practical methods for measuring systemic risk.[8] Our goal should not be to find one all-encompassing measure but to develop a menu of useful indicators to guide regulators' attention to evolving problems.

Once we arrive at a clear definition of systemic risk and agree that the goal is to reduce the costs imposed by systemically important institutions, we must then design policies to achieve that objective. The second principle would then suggest that committing to a systematic approach for resolving failing firms that may pose systemic risk should be a critical aspect of policy. Fortunately, regulators already have a resolution procedure for systemically important commercial banks. The FDIC has the authority under FDICIA (the FDIC Improvement Act) to resolve a large bank failure by operating a bridge bank for up to five years, thereby reducing systemic disruptions as it resolves the bank's problems. The bridge-bank authority requires the FDIC to pursue the least cost resolution once systemic risks have receded. This means that common shareholders lose their investments. Uninsured creditors receive imposed haircuts based on historical recoveries. These payments help mitigate the threat of a run, reduce the costs of failure for the bank's claimants, and impose market discipline.

Thus, a reasonable resolution regime for nonbank financial institutions could easily be modeled on the FDIC's bridge-bank approach. Such a resolution procedure should address some of the shortcomings of existing bankruptcy law, which seeks to maximize the payoffs to the firm's creditors and makes no provisions for systemic considerations. We need a resolution mechanism that explicitly addresses ways to reduce financial disruptions and minimize the costs to taxpayers. As in the FDIC's bridge-bank authority, uninsured creditors could receive expedited payoffs based on historical recoveries, generally less than 100 percent, while shareholders of the failed institution would be wiped out.

This is very different from government actions taken in our current crisis, which have served to provide 100 percent protection for all creditors. While reducing the threat of a run, such a policy reduces the incentives for market discipline and increases moral hazard.

In keeping with the third principle of transparency, the resolution procedure should be communicated clearly to market participants to reduce uncertainty about how regulators will handle troubled firms. Doing so helps commit policymakers to the resolution mechanism, making it harder for them to succumb to the short-run temptation to prevent the failure of an institution deemed too big to fail. A transparent resolution mechanism that ensures an orderly unwinding of systemically important financial firms also reduces the artificial incentive for firms to grow too large and helps reduce systemic problems from emerging in the first place.

In keeping with the fourth principle of ensuring central bank independence, I do not believe that the Fed is the appropriate institution to run, or fund, such a bridge institution. Doing so may result in serious conflicts of interest between monetary policy and the resolution of a single institution and thereby threaten the Fed's independence.

By following the four principles I have outlined, we can work toward creating an environment in which no firm is too big or too interconnected to fail. When a firm does fail, the resolution mechanism would already have been clearly defined and communicated transparently to the market, which would expect it to be systematically followed. The consequences would be to reduce uncertainty and stress in the marketplace.

We also need more systematic policies for handling financial firms whose financial condition is deteriorating. One lesson learned from the savings and loan crisis was that insolvent firms permitted to remain open make poor decisions. The regulatory forbearance that did not close insolvent institutions in a timely manner contributed to the crisis.

As part of FDICIA, regulators are now required to take prompt corrective action based on pre-specified triggers. While not perfect, prompt corrective action (PCA) constrains regulators to behave in a more systematic and predictable fashion as a bank begins to experience stress. This limits the discretionary authority and reduces opportunities for forbearance.

Consistent with the philosophy behind the prompt corrective actions of FDICIA for commercial banks, I believe systemically important nonbank financial firms should face greater regulatory oversight to reduce the probability of insolvency. Regulators could look at a variety of indicators. Information from securities markets, such as correlations among spreads on credit default swaps, can be useful. Regulators might expand the range of available market indicators by encouraging firms to issue to investors new securities designed to aggregate market estimates of systemic risks. For example, academics here at the University of Chicago, and at other institutions, have proposed using contingent capital securities or a market for insurance against capital impairment as possible supplements to regular capital requirements. The market prices of these instruments might provide regulators with useful signals of systemic and financial stress.

Armed with such signals, regulators would be able to react — indeed, should be required to react — in a more timely way to increased stress in markets or institutions, following guidelines similar to that found in FDICIA.

Elevated indicators of systemic stress could first trigger enhanced information collection and regulatory scrutiny. Signs of further stress could lead to regulatory actions, such as increased premiums, increased regulatory capital, or perhaps requirements to better insulate systemically important segments. In these ways, firms generating systemic risk would be taxed for the externalities generated by their activities. As indicators of systemic risk rose further, they might trigger recapitalizations, as in recent proposals in which banks would be required to sell a certain amount of convertible debt to the market that would be converted into equity under well-specified conditions, providing a quick, transparent method for recapitalization. The holders of convertible debt, who face the threat that their claims would be converted into equity, would also become an additional source of market discipline. Finally, serious danger signals would trigger planning for closure or some other resolution procedure.

Although I have elaborated on the role of regulatory interventions to address systemic risk, I want to emphasize once again that regulation is not a substitute for market discipline. I have noted that regulators should monitor market indicators of stress and that convertible securities might supplement regulatory capital requirements. These are concrete examples of the complementary roles of regulatory discipline and market discipline, but they are only examples of a general approach to regulation. Regulators cannot hope to foresee and control all events. It is important that we design a regulatory structure that enhances the effectiveness of market discipline and doesn't try to replace it. The regulatory structure must recognize the central role of markets in pricing and controlling risks and in allocating credit.

▸ The Role of the Fed in Financial Stability

Finally, I would like to turn to the role of the Federal Reserve in supporting financial stability.

Chairman Bernanke has suggested that the Federal Reserve have a formal mandate to regulate systemically important payments and settlement systems. This aim is consistent with the Fed's existing mandate under the Federal Reserve Act to ensure the integrity, efficiency, and accessibility of the payment system. Of course, as I have already mentioned, determining precisely which systems are systemically important and how to regulate them requires careful consideration.

Others have suggested that the Fed become the macroprudential overseer of the stability of the entire financial system. Here, I think we should proceed with great care. We must avoid giving the Fed a mandate for financial or systemic stability that is too vague or too sweeping. We must set objectives that are both feasible and clearly defined. Otherwise, over-promising puts the central bank's credibility at risk and jeopardizes the Fed's ability to meet its other important objectives: price stability and sustainable economic growth. Instability or volatility in the general level of prices can also be a significant source of financial instability. Consequently, we must make sure that in trying to cure one source of financial instability, we do not sow the seeds of another.

Transparency is also essential to improving financial stability. An important lesson from the recent crisis is that regulators and market participants had inadequate information about large firms' exposures and their counterparties. Lack of this information made it more difficult for regulators to decide whether and how to intervene. The industry itself is already taking some steps to increase transparency. For example, private firms have recently launched data portals providing information to the public on credit default swap (CDS) transactions.

Standardization can also enhance financial stability by improving transparency. The New York Fed and the industry have been working for several years to improve the clearing and settlement arrangements for over-the-counter credit default swaps. Regulators are encouraging the establishment of central counterparty clearinghouses to handle CDS transactions. Clearinghouses and other central counterparties routinely collect information about firms' exposures as part of their monitoring mechanism and impose appropriate participation standards, including initial margin requirements and collateral requirements.

My key concern in considering the Fed's future role in ensuring financial stability involves my fourth principle: how to ensure the Fed's independence to conduct monetary policy. I have already argued that the Fed should not have responsibility for funding or managing the resolution mechanism for failing institutions. Nor should its lending policies stray into the realm of allocating credit across firms or sectors of the economy. The perception that the Federal Reserve is in the business of allocating credit is sure to generate pressure on the Fed from all sorts of interest groups. In my view, if government must intervene in allocating credit, doing so should be the responsibility of the fiscal authority rather than the central bank. That is why I welcomed the joint statement of the Treasury and the Fed on March 23, 2009 that acknowledged that in carrying out its lender of last resort responsibilities, the Fed should avoid both taking credit risk and allocating credit to narrowly defined sectors or classes of borrowers. Instead, the Fed's aim should be to improve financial or credit conditions broadly. The statement said plainly that government decisions to influence the allocation of credit are the province of the fiscal authorities.

Another point of agreement between the Treasury and the Fed in their joint statement was the need to preserve monetary stability. The Fed's lending programs have dramatically altered the types of assets on the Fed's balance sheet as well as its size. When financial markets begin to operate normally and the outlook for the economy improves, our balance sheet must contract if we are to maintain price stability. Some of the new facilities will naturally unwind once they are terminated. For example, the commercial paper lending facility only purchases commercial paper of 90 days or less.

Yet, some of the assets will not go away so quickly. For example, the Fed has begun the process of purchasing more than $1 trillion in mortgage-backed securities, many of which will not roll off its balance sheet for years unless the Fed sells them in the marketplace. The Fed also plans to purchase a substantial amount of asset-backed securities whose maturity will be about three years and perhaps longer.

Unwinding from these lending and securities programs will not necessarily be easy. Will there be pressure from various interest groups to retain certain assets? Will there be pressure to extend some of these programs by observers who feel terminating the programs might disrupt "fragile" markets or that the economy's "headwinds" are too strong? Such pressures could threaten the Fed's independence to control its balance sheet and monetary policy. We will need to have the fortitude to make some difficult decisions about when our policies must be reversed or unwound.

By setting realistic and feasible objectives, pursuing a systematic approach to its lending policies that avoids credit allocation, and communicating its objectives and actions in a clear and transparent manner, the Fed can operate independently of these types of pressures and resist them when they arise. This will help the Fed better ensure both its ability and its credibility to maintain financial stability as well as its monetary policy objectives.

In sum, the financial crisis has underscored the need for relying on sound principles to guide policymaking. Today I've outlined four principles for sound central bank policymaking that apply not only to monetary policy but also to financial stability and regulatory policy.

In particular, I have applied those principles to three key issues that confront us as we pursue regulatory reform: articulating the central bank's role as lender of last resort, dealing with the issue of firms that are too big to fail, and determining the Federal Reserve's future role in promoting financial stability.

History tells us that crises invariably lead to regulatory reforms, and as we consider the thorny issues such reforms must address, we should beware the risks of rushing in without first agreeing to guiding principles and objectives. We must avoid "quick fixes" that may have unintended consequences, inadvertently hamper market competition or innovation, or create conditions that provide the foundation of the next crisis. Moreover, the financial industry is undergoing significant change, and what the new landscape will look like remains unclear. If we rush too quickly into reforms, we may find them ill suited to the new environment. Nevertheless, we can and should think about ways to strengthen market discipline. And while I am not convinced that simply creating more regulations will guarantee financial stability, it is clear we can have better regulation and greater stability if sound principles guide our policymakers. ◆

Haiku of the Day

EACH DAY IS YOURS

Address by ELLEN TANIS AWAD, Director of Student Activities and Greek Life at Hope College

Delivered to Hope College Commencement, Holland, Michigan, May 3, 2009

Thank you, Emily, for your kind words. Members of the Hope College Board of Trustees, President Bultman, Provost Boelkins, faculty and staff, alumni, parents, family members and friends, and most importantly, the Hope College graduating class of 2009; thank you. I'm so grateful to be here celebrating with you today.

A few years ago, I was raking leaves and feeling frustrated by the quantity of my neighbor's wet, muddy leaves in my yard. You need to know that there are no trees in my yard at all. No trees at all. All of the leaves that I was raking were rogue leaves who had infiltrated and taken over my entire backyard. The task seemed a bit overwhelming. What did I do about it? I decided to write a haiku poem. Here it is:

- wet mud-covered leaves
- overtaking my whole yard
- stubborn filthy leaves

Let me give you a little more background. As I raked and festered with frustration that day, I was struck by the words of the 118th Psalm. "This is the day that the Lord has made. Let us rejoice and be glad in it." To do so, however, I had to choose to refocus my negative energy. I chose to go back to something I learned in third grade, haiku poetry. Haiku poetry requires counting the syllables in a 5-7-5 pattern and it's only three lines long. So, as I raked, I composed a poem about the leaves. Choosing to refocus my mind alleviated my anger toward the multitude of rogue leaves in my yard, and that day started a new hobby for me of composing haiku poetry. It has become a way for me to change my perspective on a situation as well as to celebrate loved ones on special occasions. To rejoice and be glad in each moment God gives us.

Today, I thought it fitting to write haiku poems for you to celebrate you and your Hope experience. However, to do this with authenticity, I needed to get a better grasp on your perspective of your Hope years. This past semester, I emailed many among you and collected literally pages of rich words from you describing your time at Hope College. The words you emailed to me reflect the depth and the breadth of the Hope experience. The way the email responses came back to me was revealing as well. The first email response came back to me four minutes after I sent the original request. Thanks, Kolleen. Some of you wondered why I needed the words. Most of you made a comment about hoping your list was of help to me and that you would be happy to do more if needed. This is why working with you for the past four years has been such a joy. You want to contribute! Now, unfortunately, I was unable to use RJ's love for Kletz tuna melts in a poem, but I did delight in creating more haiku poems than I can share here today.

Before we get to the first of your poems, I want you to think back. Take a moment to think about the person you were when you set foot on campus for Orientation in 2005. Who were you when you met your roommate for the first time? Who were you as a first-year student running around the Dow Center at Play Fair when you began your journey here? Who were you on the first day of class, the first day of practice, the first day of figuring out the scramble system at Phelps?

Now, let's jump ahead to where you are today, and listen to your words in the first haiku written for this day:

- transforming journey
- challenging, full of learning
- exponential growth

Let's unpack your words from this haiku. Transforming journey. You have been transformed by late-night discussions with your roommates, accomplishing a goal in your Greek organization or student group, and participating in service projects or a spring break mission trip. Challenging, full of learning. You have been challenged during classroom discussions, broadened your knowledge while conducting research, and stepped outside of your comfort zone while studying abroad. Exponential growth. Your exponential growth was a result of your investing in your coursework, involving yourself in the Hope community and giving back through leading in New Student Orientation or as a captain of your team.

Now, hear your words in the next haiku of the day:

- best years of my life
- defining, spirit filling
- prepared to move on

The best years of your life came out of the zest with which you approached the Nykerk Cup Competition or the Pull, the passion with which you developed friendships, and the excellence with which you performed on the stage, on the court or on the field. Defining, spirit filling. These years have been defining for you. It has been a time when you had to make your own decisions, were faced with the reality of life-altering circumstances, and had to listen quietly to discern your calling in life. They have been spirit filling years for you as you joined in communion at the Gathering, sang songs of praise with Gospel Choir, or prayed together in your small group. Prepared to move on. You are prepared to move on. These are your words. You are prepared to move on. Believe it.

Your Hope College experience has laid a foundation for you to go out to make a difference in the world. This is not cliché. You are not the same kid you were at Play Fair. You have mastered the scramble system. Your first college roommate may now be one of your closest friends. You have moved from figuring out what liberal arts means in your First-Year Seminar to being able to articulate your philosophy of life in your Senior Sem. Your journey here at Hope has transformed and defined you. You have become the person you are today as a result. You are a young adult prepared for the next part of your journey.

You have given much to the Hope community and we have been transformed by your time with us. Every year, I hate to see the seniors leave, and this year is no different. You have changed our community with your presence among us. In honor of you, I have written a haiku poem that springs out of priest, theologian, and author Henri Nouwen's writing in *Bread for the Journey*. Here it is:

- let your center speak
- courageous, deeply rooted
- keeping hope alive
- Let's listen to that again:
- let your center speak
- courageous, deeply rooted
- keeping hope alive

These are thick, rich words that mean much. A few weekends ago, I found myself dwelling on the words in the haiku poem. Then, as I was sitting in a pew at my church on Youth Sunday, a particular Hope College senior was being recognized for her service and leadership with the middle school youth over the past four years. Immediately, the words of the haiku sprung back into my mind. While at Hope, she had let the choices she made in life represent her center or the core of who she is. Her decisions came from her heart - her authentic self. She was courageous. Actually, I think anyone who dedicates any kind of time to youth going through puberty is pretty brave, but her courageousness allowed her passion and choices to guide her in a life that is deeply rooted, not superficial. She let her center speak through a life deeply rooted in faith, calling, leadership and service. I have no doubt she will continue to live in such a way, keeping hope alive.

The last line of the poem, keeping hope alive, brings me back to that day of raking leaves. It seems to me that "raking leaves" is really what makes up about ninety percent of life. And, each day, you have the choice to rejoice in the day the Lord has made while you rake through the paperwork on your desk, clean up the muckiness of a strained relationship, or bring order to the chaos of your wind-blown schedule. Here's what I want you to remember: rake leaves with authenticity. Authenticity grows out of all that you are. It is living into your faith daily, not just for an hour on Sundays. It is through being a reliable friend each day, not just when it fits in your schedule. It is through acting on your convictions when faced with adversity. It is through living an authentic life – in each and every moment - that you will be able to keep hope alive.

As you look ahead, think about how you will choose to be in each moment. You have the ability to choose how you will greet each day and each person or situation you encounter.

- let your center speak
- courageous, deeply rooted
- keeping hope alive

Thank you. ◆

VITAL SPEECHES OF THE DAY

1010 E. Missouri Ave.
Phoenix, AZ 85014