THE BROOKINGS INSTITUTION

CAPITAL MARKETS AND THE FISCAL CLIFF

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PARTICIPANTS:

Welcome:

GLENN HUTCHINS Co-founder, Silver Lake Vice Chairman, the Brookings Institution

Keynote Address:

ROBERT GREIFELD CEO NASDAQ OMX

Moderator:

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PROCEEDINGS

MR. HUTCHINS: Good afternoon. My name is Glenn Hutchins. I am Vice Chairman of Brookings. I would like to welcome everybody here today. Congressman Oxley, how are you sir? A great pleasure to see you. I got to cut my remarks about Sarbanes Oxley out of this now.

It is my great pleasure to welcome my colleague and friend, Bob Greifeld, CEO of the NASDAQ OMX stock market to Brookings. There is no doubt that Bob is an extraordinarily successful business executive. Under his tutelage, the value of Brookings has increased by a factor of four, \$6 per share to \$25 per share. Revenue has gone up \$400 million to \$1.7 billion. Cash-flow has gone from negative to \$800 million per year. And he has taken what was a niche market in the United States and made it one of the most important global markets, 22 markets, 10 clearinghouses around the world. That's the facts. Those are very straight-forward, and he has a track record to be proud of.

The market he has built, however, is the reason why we have asked him to be here today. The NASDAQ stock market lists 3200 companies around the world. Its great strength is to list the world's most important technology companies. And almost all of the important technology companies in modern America as we started out on the NASDAQ stock market; all of them.

And during my business career, NASDAQ has been the venue for a successful young growing company to get the capital to continue its growth. This is the point I want to emphasize. We say that, or you oftentimes hear it said that small companies create all the jobs in America. That is only half true. It is small growing companies that create all the jobs in America, the companies that start out small and

become Google. They start out small and become Federal Express. They start out small and become places like the NASDAQ. Those companies go disproportionately to the NASDAQ to create the equity funding to create the jobs. This is one of the key mechanisms by which jobs are created in America.

We have lost track during the debate around Sarbanes Oxley, more recently during the debate about Dodd Frank, that our capital markets are the envy of the world. Our equity markets are something that are unique to America. They are deep. They are strong. They are one of the key ways in which we keep growing an economy which is competitive in the world. That is why we have asked Bob to come here.

When you spend time around Washington, you hear people all want to know what market participants think about this, what market participants think about that. Well today we have the market today personified by Bob Greifeld as CEO of the NASDAQ OMX stock market. It is my great privilege and pleasure to welcome him to Brookings.

MR. GREIFELD: Thank you, Glenn. Thank you for that kind introduction. I do have to start by saying that I first met Glenn probably seven or eight years ago. And at that time, I was a capable and focused business executive but did not have a lot of time to spend on views of the wider world. Under Glenn's tutelage, that has changed, and we have had a number of interesting discussions through the years. So as I stand here today and talk about certain policies, I want you to recognize, if you happen to disagree with me with what I say, blame Glenn for what he has taught me through the years. So thank you, Glenn.

So certainly, it is my great pleasure to be here at Brookings. I certainly appreciate the opportunity to speak today. I would like to especially thank Martin for setting this up, so thank you Martin. And certainly, we all need to take a very hard look at

the significance of the fiscal cliff that is facing the United States of America here.

What is the consequence of our failure to act is a question we would like to answer today. And what is the political mobilization that is necessary to really prevent further damage to our economy? We all here today have an important role to play in solving the fiscal challenges facing the U.S., and I look forward to discussing that forward with Martin here, from the stage.

As Glenn said, I am the President and CEO of the NASDAQ OMX Group. We operate the NASDAQ market here in the United States, 22 markets around the planet, and we are certainly proud of what we bring to the table. And when you think about me standing here today, it is kind of interesting for the operator of the stock markets to be talking about a debt crisis, right? Because when we talk about debt; 1) it is not equity; 2) we and NASDAQ OMX around the world don't trade it. We don't list it. We don't regulate it. So why am I here talking about that today?

I want to talk about the federal debt today and the deficit because, in many ways, it is, in fact, a spreading cancer. I call it that because, like a patient with a well-diagnosed cancer, we know it is there and we know that it will spread and we know what it can do. But we are now not operating as a prudent patient. Too many Americans are in fact choosing to ignore it. We are in some form of a state of denial. Because it isn't yet causing a crisis, too many Americans have a false sense of security that everything is okay. There is no decisive action required today. We feel that we can deal with it tomorrow. Of course, neither of these two beliefs are true.

What is certainly true is the Federal Government seems quite able to add \$1 trillion each year to the national debt. Many people believe we can do this indefinitely. Too many people actually believe this can go on for decade after decade. They think so because, one of the facts is, as a country, we concurrently borrow money, 10-year-

money. My notes here say 1.7 percent. But in fact, last week it went down under 1.6 percent. That is kind of a happy state of affairs. But we do not deserve to be able to borrow that money so cheaply because, as a country, we have not yet demonstrated the vision or the courage to decide how we in fact will pay it back. We must decide. We must decide because the process of delaying the day of reckoning with our \$16 trillion debt is hurting our economy today. We don't see it, but it is hurting our economy, our businesses and is in fact hurting the markets.

The fiscal cliff scenario, with its mandate for higher taxes and reduced federal spending is now just two months away. And unless congress and the white house intervene, this in fact will happen. As the Wall Street Journal reported on Friday, no doubt, most companies would suffer if the U.S. goes over this cliff. And the economists say the tax increases and spending cuts will certainly slow economic growth and will drive us into recession.

Now, my good friend Terry Duffy, who runs the CME, told a Wall Street analyst just last week what we have seen is corporations hoard cash, individuals also hoarding cash at the same time. There is so much uncertainty where to keep it, where it is safe and where it is not. This is not the average course of business and people need to realize that. Those of us outside of government must continue to make it clear to Washington that compromise can no longer be considered a four-letter word. And in discussions and debates that prevented the decisions from happening last year, we must move past that.

It certainly has been a plus to hear both the President and the House Speaker say repeatedly over the last two weeks that compromise is now what both parties want. Words are a start, but words are easy and we must have a resolve for action.

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I, like many people, do not expect a grand bargain to be achieved by the end of the year. And extension of the Bush tax cuts in some form, and a deal not to enforce the across-the-board federal spending cuts on January 1 could be the most we could reasonably hope for. That is going to leave the markets in some degree of uncertainty. The uncertainty relates to whether or not the grand bargain will be released in the first half of next year. That uncertainty really is a cause for concern for all of us in the business community.

Now, when we think about our U.S. indebtedness and the ratio of an increase in the federal debt, it is important to recognize that our ratio of gross debt to GDP is now more than 100 percent. Among the G20 economies, we now rank third in indebtedness behind Japan and Italy. Five years ago we were at 62 percent. We rank 9th. So big change in five years. At the current rate of U.S. Federal debt rising by \$1 trillion per year, the ratio of debt to GDP will be 114 percent by the next presidential election in 2016.

As many scholars have noted, increasingly of late -- which is a good sign -- the downfall of great nations across the centuries always begin with their inability to respond when the foundations of their financial houses cracked. The truth is, debt is not an alternative means of funding. Debt in our context has become a convenient narcotic. As easy and addictive as any drug, lowering us into complacency by postponing the hard choices of raising revenue and/or increasing or reducing spending. Increasing levels of debt also increases the amount of interest to be paid further increasing the amount of resources that ultimately we need to be devoted to repaying the debt.

I run a company at the center of global markets that interacts with 3200 listed companies around the world and many market participants. I speak everyday to chief executives who run these companies. We all agree that a government that incur a

substantial recurring borrowing as a means of funding eventually will act like a company short on cash-flow. By this, we mean a company short on cash-flow will always postpone investments. They will cut maintenance. They will cut R&D. They will cut pensions and they will cut benefits, and otherwise shortchange its figure. All the while, it will scramble in search of new opportunities, new sources of revenue outside its existing operations.

When a government behaves this way, it not only short changes the future, it profoundly impacts the entire economy and all its citizens. The longer we go with a better balance between federal revenue and expenditures, the more we will postpone and deny expenditures necessary to support the future. Put simply, we are creating a terrible burden for our children and our grandchildren tomorrow, and exacerbating the paralysis of uncertainty in the markets that I live in today.

The historical evidence suggests that the long-run implications for our economy could be severe if our trillion-dollar a year federal borrowing continues unchecked. For example, highly indebted countries with debt exceeding 90 percent of GDP, on average, experience a reduction in GDP growth of one percentage point per year relative to less indebted countries. At the individual level, a slower pace of GDP growth means that per capita GDP could be reduced by as much as 30 percent by 2030. This translates into \$18,000 less per year for every man, woman and child in the U.S. than we would have otherwise earned. And that prospect is now less than 20 years away. A major financial crises brought on by high levels of debt could have significantly great and negative impacts on the economy than these numbers indicate.

In the short term, the primary impact of a debt trajectory viewed as unsustainable is more uncertainty. We live with that today. There is more uncertainty about future taxation and spending policy. There is more uncertainty about government's ability to prepare for future needs by reloading the fiscal cannon necessary to deal with

the GO political or economic issues. There is more uncertainty about when central bank intervention in the credit markets will end and the subsequent course of interest rates will increase. And finally, there is more uncertainty about who will hold the debt, who will get caught holding the bag when the low interest rate party ends.

At NASDAQ, our listed companies cannot innovate. They cannot concentrate on investigating in new capital, higher new workers, grow their businesses when they have to worry about the safety of the cash. They hesitate to invest due to uncertainty about future growth in taxes. And in the case of the sequester, they even need to plan for lay-offs.

There are enough challenges and headwinds for managing business operations day to day. Chief executives understand that. But when they survey the destructive market consequences created by the federal debt, they shake their heads and think, "These are self-inflicted head wounds. Why is this still happening?" Here is another data point. A survey conducted in September by the Senate for Audit Quality show that 35 percent of investors say continuing budget deficits and federal borrowing have more influence on their confidence than any other economic issue or event. That was in September. I would venture to say it is a lot higher today if that survey was taken.

When our listed companies do not grow, investors do not buy stocks, and entrepreneurs cannot raise capital. When these things do not happen, the U.S. economy does not grow and the American people suffer, and so does the dynamic nature of our markets.

Well people might ask, what does that mean, with respect to the market? Why does that matter? Why does the financial health of stock markets matter in our economy? The stock market is the most transparent price discovery mechanism for capital. It sets the price at which equity risk and equity return are exchanged between

investors. Entrepreneurs and investors also use stock market prices to make their own decisions about raising capital and investing in new companies. But the stock market does not set the risk and return in isolation. It does so in the context of the broader economy where stocks must compete with other assets for investor's capital.

The government's inaction in confronting our fiscal imbalances and the central bank intervention and credit markets to keep interest rates low and finance the deficit is creating distortions in the competition for other assets. We all realize, at some point, this distortion will end. It is the same kind of deleveraging that we have felt since the financial crisis of 2008, but this could be on a much grander scale.

Many types of assets will be re-priced. Bond yields will rise, bond prices will fall, and the cost of financing current deficits will increase. There won't be much cash available to move into government investments for the future. New bridges, research in the basic sciences, public schools, better equipped for the 21st century, and so on. It will mean less spending on technology, less capital available to current listed companies, and less capital for entrepreneurs looking to go public on our market. A decline in American ingenuity would be a consequence. And over time, there would be certainly a decline of our position in the world. As all prices adjust, market forces could even reach a point where investors refuse to buy U.S. Treasury bonds.

We see investors reacting to the potential of these realizations now through an aversion to risk. Since 2007, over \$1 trillion have flowed into bonds, and even a greater amount has flowed out of equities. In addition to a lack of clarity about future tax policy, particularly on equity capital gains and dividends, this act as a deterrent for equity investments. \$1 trillion moving into fixed income where fixed income is basically paying zero. That shows a fundamental aversion to risk, which is new to our society and our culture since 2007.

For companies able to access the credit markets, times have been pretty good. Investors' appetite for this debt translates into cheap money for many companies. Many start-up companies, however -- and this ties back to what Glenn was referencing -do not have access to debt financing. The companies that create jobs in this country rely on equity financing. The debt markets have never been available to them that are not available to them today. So the vicious cycle that we are in today, the start-up companies have limited access to capital. That capital is not there because they are growing aversion to risk. That growing aversion to risk obviously triggered by a mass uncertainty with respect to what we are about and our plans for addressing the deficits. So I tie back to the fact that 1.7 percent is certainly attractive to many companies who have been able to have access to debt. And the question is, do we deserve that rate and why is that rate here. So really, a debtor's cost should be based on their ability to repay. If our ability as a nation to repay was based solely on our ability to print money, debt would cost much more than 1.7 or 1.59, whatever low number it is today. That is certainly because inflation would be created as a result of the printing of money. On the other hand, our ability today to repay should be based on our ability to increase revenue or decrease spending. Now with this political dysfunction, we are not sure if we have that. We appear unwilling or unable to use that very tangible, immediately accessible ability. We have to recall the posturing in Washington last year around the debt ceiling debate, the reaction to the recommendations of the Simpson Bowles Committee and the performance of the super committee. The reality is, our ability to repay is based primarily on the belief that we will find a buyer for our future debt and that we, in turn, use those buyer's funds to repay our current debt. In bankers' terms we think we'll be able to just keep rolling it over. Others have said and I will say that we risk losing the US role as the World's reserve currency if we do not behave responsibly. That is not a current risk but

it's certainly a risk within the decade when you look at the pure math of it and that pure math certainly ignores the emotional aspect of the financial markets.

Our ability to find a buyer is based on a credit market's assessment of future actions of the Fed and of the dollar's role as the world currency. So, the extent that changes, obviously we're dealing with a new world. When eventually rates go higher, either due to the Fed finally credit tightening or our erosion in the role of the dollar, the world's role of the dollar, then credit will no longer in fact be cheap. And one point seven, one point six percent will be a dim memory.

If this occurs at a time dictated by the markets rather than by Washington's own choosing, then there will be a number of very significant consequences. And investors begin to refuse to buy US Government debt at current yields; it is even possible that you could see funding crisis in the years to come. Should another recession result the Federal Government would then be hard-pressed to reload the fiscal cannon. The cost to the Federal Government in terms of debt service in that environment will be in fact enormous.

Investors and retirees who have sought security and safe debt will see their portfolios lose value. Home buyers will see the cost of mortgages rise and homeowners likely will see the price of their homes fall as few buyers qualify for these more costly mortgages. The Government itself could then have its back to the wall, will be then forced to confront more drastic steps to restore fiscal balance if the Government were not to take action now.

So, why hasn't the Government taken action? Let's be candid about this. Putting aside the rhetoric and the posturing of the past two weeks the behavior in Washington in recent years confirms we've lost the ability to compromise. Politicians who attempt to move to the center are set upon by their own side. One side faces continuous

pressures to never allow a spending cut and there is a counter veiling pressure on the other side to never permit a tax increase.

Both sides act as if they're committed to a dogma that states the other side cannot win no matter the consequences. The vast majority of Americans consider this irresponsible. They want solutions, policies that seriously confront the federal debt prison that we're facing.

As I think about this in many ways, the situation within the Beltway is a variation on the classical prisoner's dilemma game. In the prisoner's dilemma, each player's optimal action leads to an outcome that is damaging for both. In the case of the federal debt in the government, what each political party perceives as its optimal action is an essentially neutral for them but extremely harmful for the economy and the rest of us.

I am one of more than 80 corporate CEOs who have signed on to the campaign to fix the debt. Some of you might have seen the news about our goals and our agenda. For example, we think there is a lot to like in the Simpson-Bowles recommendations. We all recognize a common thread, the inability to be sustainable in the federal budget. This inability to have a sustainable federal budget is hurting our business in a fundamental way.

We all agree there must be shared sacrifice. The federal budget must be put on a path to sustainability that can clearly withstand any changes in the political winds that might occur in 2014, 2016 and beyond. This means additional revenues will need to be raised including from businesses by broadening the tax base while reducing the tax rates, the top rates. Tom Quinlan, President and CEO of R.E. Donnelley (sic) & Sons and one of the fix the debt advocates supports the reduction of the elimination or reduction of certain tax deduction in exchange for a lower corporate tax rate and the repay to ration of cash held outside the US.

The uncertainly caused by not addressing the fiscal cliff federal deficit will continue to hurt business, he told me recently. Tell us the rules and we can play the game. If the rules are uncertain or changed then we cannot start to play the game. We also acknowledge that federal spending will need to be curtailed including spending on our favorite government funded programs.

You know, I do want to be clear you probably can't tell yet that I am optimist. I certainly leave the gloom and the doom most times to my lawyers and my economists. But I do say it has been somewhat hard to be completely optimistic about our economic future if the budget problem is not addressed. Globally, we are seeing recession in much of Europe. China's growth is slowing as is growth in other emerging markets.

Our failure to act on the US budget is aggravating existing weakness in the global economy. So, this is clear. It is time for real leadership in Washington, for our elected officials to have the courage and the vision to do something right for our country. It's happened under President Reagan and President Clinton when major compromises were achieved on debt and deficits. It can and should happen again. If not, our country's economy will grow more slowly that it would otherwise as the level of government debt grows and uncertainty continues about how the budget impasse will be resolved.

At NASDAQ, I expect we will continue to face headwinds in our core business as companies growth prospects fail to excite investors. This has negative implications for our trading and listings business. We may still do better than our competition but not as well as we should be doing and not as well as our economy should be doing. The confidence of executives who invest to grow their businesses as well as investors in our markets is directly related to the problem of the federal debt and deficits.

We also recognize the fiscal cliff and the sequester are not a

compromise or even a path to sustainable growth. These policies were created simply as a blunt force threat to prompt the government to act in the future. Now is the future and we're waiting to see which side will blink and who will win. It is a process of governing by mutually assured destruction, a dangerous way to force the making of laws. Our elected officials must recognize the principle of governing responsibly is paramount to their legitimacy. Governing to win does not in fact provide legitimacy.

Before we begin the Q and A session I want to simply state that after this year's long, and it certainly was a long and sometimes bitter political season, it's certainly now time for our nation to come together. Time is running short to decide how we'll address our national debt problem before it really becomes a crisis. So I certainly want to urge all of you to join in the campaign to fix the debt. There are other ways to get the message across. We certainly think this is a very effective means. Everyone can and pitch in now in their own way.

At NASDAQ OMX we've created a website for employees in the US to commit to fix the debt and communicate to their representative in Congress about the urgent need for action, for compromise across the aisle to find a solution. Business leaders, employees, investors, retirees, we all share a huge stake in the future of this economy. I especially invite chief executives of other companies who have not yet committed to fix the debt to join me and the more than other 80 CEOs already involved in helping to drive this movement which was organized a year ago through the Committee for Responsible Federal Budget.

As we continue to build rapidly strong national voice demanding compromise will make it more appealing and politically possible for our representatives to take the necessary actions. So, thank you.

MR. BAILY: Why don't you sit in the --

MR. GREIFELD: I will sit wherever you want.

MR. BAILY: Yes, I think that's where we want you, either one.

Thank you. I'm Martin Baily and I'm going just start off the questioning and then we're going to throw it open to the audience.

First off, I want to congratulate you for this effort to fix the debt. I think many of us had felt that real pressure from the business community was going to be very important to getting this done. So, I think that's terrific. Now, you mentioned some of the consequences that are likely to happen as a result of continually increasing the amount of debt. That equity markets may suffer. Eventually interest rates will rise. Now, a lot of people have been hearing that for a while and yet maybe with a blip around the fiscal cliff, actually equity markets and interest rates have stayed low.

Can you give us a sense of why that is or when, what's the sort of time horizon in which we might see some of these impacts? Because that would put pressure on Congress to do something if these markets --

MR. GREIFELD: Well, I think we've seen that pressure already. So, when you speak to the fact that a trillion dollars has basically moved into the fixed income market primarily from the equity market, that shows investors as saying they have a real aversion to risk. And so, that demand in the debt market has helped with central bank action to contribute to the low rates. But that doesn't speak to our unemployment issue.

So, when you look at what drives the job growth in this country its small business. As Glenn said it's small business that are growing. Those small businesses that are growing are right now precluded, never have been part of the debt market and are precluded from the equity market in some fundamental way because you don't have the supply into that world. Now to give Congress and the White House credit is one of the few, if any, bipartisan efforts we saw last year was the Jobs Act. And certainly that

was in recognition that yes because of the state of affairs we were choking the life out of this small business growth. And that was meant to help. It's a good positive first step.

So, we're definitely seeing clear impact today in the equity market as a result of the world that we live in.

MR. BAILY: Now, I think there's a lot of merit to Simpson-Bowles and I agree with that and we have our own Alice Rivlin, the Rivlin-Domenici Plan as well, and we see a lot of merit in it. But a lot of those things are actually pretty painful to get through in the end. Let me say a word about business taxes. I think many people including myself are concerned that business taxes or the statutory is high and we may be actually be discouraging people from investing in the US. And yet, on the other hand we need more revenue. In some sense we need to raise taxes.

So, how do we square that circle so to speak?

MR. GREIFELD: Yes, it's a great question. So, when you look at the business tax rates, we're I think second of the developed countries with respect to what we charge corporations. I think second to Japan. And one of the markets we run is Sweden and Sweden is a country that believes in government. And they're taking their corporate tax rate down from 26 percent to 22 percent. You're obviously aware of this.

So, we're not competitive from that point of view. So, to the extent that we address that tax rate in the corporate world, we would certainly see a renewed effort to invest in the US. The concept of broadening the base, we do have obviously a gross tax rate and then that effective tax rate and so, I think you need to broaden the base but I also think you have to look at the rate.

The other topic related to that is the repatriation of funds. And again I'll use our Swedish example. So, the Stockholm Stock Exchange will celebrate their 150 year anniversary in February of next year. So, when we make a dollar in Stockholm

that's taxed in Stockholm and for us to bring that money home to invest in the States, it would be taxed again. And we're not going to do that. It just is not going to happen. So, it creates the perverse action where it's really a logical action where we make sure that we then take that money, invest somewhere outside. Do it all the time and it's not a coincidence that the last three acquisitions we've done are from companies domiciled outside the US and we're able to use what we'd call our trap cash.

So, you need to have some sensible adjustment to that policy.

MR. BAILY: Can I ask you a little different kind of question. I was at an event in New York last week, the Clearing House Event and there was a lot of ringing of hands and moaning about the reputation around Wall Street. A lot of people, a lot of banks, a lot of other people on Wall Street feel that they've taken a big hit and that their reputation is bad.

MR. GREIFELD: Why would they think that?MR. BAILY: You don't think that.MR. GREIFELD: No, I do.MR. BAILY: You do think that?MR. GREIFELD: Yes.

MR. BAILY: Is this something that just should happen with the passage of time? People will get over that or are there things that you and other Wall Street leaders can do to try to get people to understand what the role of financial markets play in our economy?

MR. GREIFELD: Definitely. Well, one is you will need the passage of time. There is no magic wand here. The credit crisis of 2008 happened. The economy is still recovering from that. There is no easy path around that. But clearly the financial industry has to do a better job talking not so much about the financial innovations but the

bread and butter products they bring to both individuals and to corporate America. Is the lifeblood, the oxygen, so yes, we do have to do a good job but it will take time and it's not going to happen soon.

MR. BAILY: Now, one of the arguments one encounters is well we didn't have all this stuff 50 years ago and the American economy did fine back then. So, why do we need all this stuff now? My answer is that we got a different economy but maybe you can sort of --

MR. GREIFELD: With respect to the financial products?

MR. BAILY: Yes, the financial products.

MR. GREIFELD: Well, I would say this much. The general hedging of risk management products that the financial industry have developed over the last number of years have been a great boon for the economy. And in terms of positioning Wall Street we have to go to the natural users of those products whether it be the farmer, the power plant person, there's reason why you want to have risk mitigation strategies as part of your business because you, one as an investor, would like to invest in the core business not the vagaries of what happens in the financial market. We have to talk to that.

The harder message for the general public is any financial market the naturals are seen as a good actor in this place, whether that's the natural buyer or seller of the instrument. So, in equity it's a long term investor is seen as a good person. For the farmer who's trying to hedge their crop risk that's seen as a good person. The harder message to deliver is that for a financial market to work properly it has to be populated by intermediaries. And that's where the intermediaries in difficult times are subject to the vilification.

So, the definition and the role of intermediaries in the marketplace is not

well understood. The importance of it is not well understood and it's also a hard message to deliver.

MR. BAILY: Let me throw it open. I've got lots more questions I'd love to ask but let's go to the audience. Ted?

TED: Hi. I have just a short question. You mentioned Simpson-Bowles and the need for revenue. And one of the ways Simpson-Bowles raises a substantial amount of revenue is through increases in taxes on capital gains and dividends. I just wanted to see is that something you and the other CEOs that you're part of the group of can endorse as part of a broader package?

MR. GREIFELD: Well, you know it has to be shared pain. So, you probably saw me gulp a little bit when I say yes. This shared pain is part of pain. So, it's going to be difficult in any way you slice it. So, yes there has to be revenue increases. Some of those revenue increases have to be painful.

I would say this, you know when I took many CEOs, they're smart enough to realize to the extent that they individually or even at a corporate level are paying somewhat more in taxes, that brings stability to this system that asset values will rise. And people are owners of assets, so they think there'll be a second stage beneficiary. So, I think people have an enlightened self-interest with respect to the fact that they believe that when you have revenue increases it can be a tide that raises many boats.

MR. BAILY: Questions from the audience?

MR. POTTER: It's another dividend question. I'm Ben Potter from the Australian Financial Review. Specifically listed in the 44.6 percent cumulative rate scheduled for next year if there's not some sort of change to the schedule --

MR. BAILY: Lost your mic.

MR. POTTER: Is it okay?

MR. BAILY: Yes, we're okay now.

MR. POTTER: So, do I need to repeat any of that?

MR. GREIFELD: I didn't catch the last part but I think I know where you're going. So, I think what you're speaking to is really a symptom of the sequester. So to the extent that there is not intelligence brought to the debate then you'll have certain actions which in the cold light of sitting in the room don't make a lot of sense. And as I said in my prepared comments this sequester was never meant to be implemented. It was meant to be so onerous that cooler heads would prevail and compromise would be the rule of the day.

So, if the question was do I think going to a 44 percent rate on dividends is a good thing, I think it's bad. And certainly that's one of the many reasons why we need to call our policy makers to task to come up with a logical plan that has a proper balance between revenue increases and spending cuts.

MR. BAILY: Let me ask you another question. One of the intents of Dodd-Frank was to move derivatives onto exchanges so that we had exchange-based trading of derivatives, but there are also some provisions around that, the counterparty credit limits and so on that may make it a bit difficult to do. What's your perspective on that? Do you think it's going to be accomplished? Is it being accomplished?

MR. GREIFELD: Well, the first thing, I would qualify your comment a little bit by saying that it was really to move derivatives more to clearinghouses --

MR. BAILY: Yes.MR. GREIFELD: And not so much exchanges.MR. BAILY: And not so much exchanges, yes.

MR. GREIFELD: They certainly are trying to promulgate more transparent trading, but the clearinghouse part of it was mandated and it does bring to light the credit dimension of transactional activity. So, in the equity world, credit quality is somewhat assumed in that you have a very short settlement cycle and you also have a very deep and liquid market. So, if a counterparty has an issue, you can quickly liquefy that position and minimize the risk.

As you get into derivatives contracts and some of them being long-dated, then the credit aspect of it becomes more real and certainly more onerous. And to the extent you're moving all that credit from a bilateral between two parties and to a clearinghouse environment, then the credit really kind of dominates the conversation. So, I think it's a good thing for us to be facing when we're not in a crisis head-on these credit decisions and how do you stress credit scenarios in difficult times? So, yes, it's complicated, yes, right now, we're mucking through it, but it's better to be doing it now than like we did it in 2008.

> MR. BAILY: Yes, question. Can you get the mike? MR. HOUSEMAN: Larry Houseman, private.

I would like to first thank you for being part of that group that spoke out or that's speaking out right now with regard to trying to put business pressure on -- make themselves more part of the discussion that's going on.

I guess my own question, over the few months, I've been reading more and more about what the situation looks like. It doesn't look particularly optimistic and I'm wondering if you had to make recommendations to someone in your family or close friends, would you be asking them to make a change in the way they go about saving for the future? (Laughter)

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MR. GREIFELD: That's a great question. So, we can move on. (Laughter) No, it's a personal question.

As I said, I'm fundamentally an optimistic. So, I do believe that cooler heads will prevail and that we'll have not so much in the lame duck session, but sometime in the first half of next year an agreement, a comprise which will put us on a path to sustainability. And I do believe and I think it was the Treasurer of Australia, Wayne Swan, said he thought America was one fiscal agreement away from returning to some level of preeminence in economic affairs on a global basis.

So, I certainly kind of almost agree with that statement, but I think to the extent we come to an agreement in the first half of next year, first, that we do something credible for the lame duck becalms down a bit and it has to be something substantial that shows that the Congress and the White House can come to a deal, right? So, it can't be just negligible where it can be ignored. That will certainly spook the markets, but if it's certainly substantial enough, a good down payment, go to a fiscal cliff agreement first half of this year, I certainly believe the underlying spirit of the American innovation and entrepreneurship is still there.

I have the great opportunity to spend much time whether it be in the Valley, New York City's got a growth area, Austin, Texas, the Boston area, there's a lot of bubbling enthusiasm out there, so, I would certainly be long-term bullish to the extent that we can have the political policymakers come to some reasonable agreement.

MR. BAILY: Yes?

MS. KAYATANI: It's Deborah Kayatani with Democracy Work.

I had a question if you could rate based on your experience from in a scale from 1 to 10 how much more you believe you need to do to educate, as NASDAQ needs to educate newbies, new reporters, new organizations, and political interests that

want to use the economy and the stock market as one and the same thing, how much more do you feel NASDAQ needs to do to educate people new and old, political and more political on the reality of the fact that the economy isn't the stock market, these terms aren't interchangeable, and there is a difference between political reporting and financial reporting?

MR. BAILY: We're going to start NASDAQ U. (Laughter)MR. GREIFELD: Yes, well, we kind of do that.MR. BAILY: Yes.

MR. GREIFELD: I mean, we have our educational foundations involved with a number of different institutions of secondary and higher Ed in terms of educating about the market, but I would go back to one of your premises.

So, certainly, the stock market is definitely some derivative indicator of the economy and it certainly is not that in the short-term, you can argue it's not that in the medium-term, but it's certainly that over the medium and the long-term. And, so, you have a situation the last number of years where the debt markets have clearly been I say supercharged and we went through some of the reasons for it and it certainly ties back fundamentally to risk aversion from investors.

But at the end of the day, the growth of the economy is tied to the growth of equity capital in the society, in the culture, so, I think the two of them are joined together, as I said, over the medium and the long-term. So, I think our education effort is around that and our education effort is understanding obviously what investing is and there's a fundamental difference, obviously, between investing and trading. So, that's kind of what we do. It's a long-term effort. I think it bears fruit over time and certainly I think where you see the markets spend more in the higher education world today than we did 20 years ago. So, it's a long-term project.

MR. BAILY: Can I ask you a bit more about the optimism you expressed and which is a big key to balancing the budget, if we can get growth going, that's going to make a huge difference.

There are some people, I'm thinking of Erik Brynjolfsson, the MIT economist, who with a coauthor wrote a book sort of saying there's a lot of innovation taking place, but it's not job-creating innovation. I don't know that I believe this, but you sort of cite Facebook and say yes, you've got 700 million or billion or whatever it is users, but it's only a tech creating a few jobs.

> Do you see the kind of innovation that's job-creating when you --MR. GREIFELD: That's working hard to find bad news and good news,

right?

MR. BAILY: Yes, yes.

MR. GREIFELD: You know this fellow, but, yes, certainly --

MR. BAILY: But he struck a bit of a chord. I mean, he got some reviews and so on.

MR. GREIFELD: But let's put it this way, when you go out to San Jose today, and it's been this way all through the credit crisis, there's more jobs than people, right? So, the last time I was there and every time I go there, I check, but you basically had just in the City of San Jose, 4,000 jobs that have been unfilled, right? And that will speak to other issues we have with respect to immigration policy. And, obviously, then the ripple effect through the economy from these high-tech jobs is quite strong and it could be a second-order impact when people make money through their stock options and how does that flow into the different market there?

So, I would say that if he's recommending we don't want these companies to grow --

MR. BAILY: No, no.

MR. GREIFELD: So, I think probably the question is: What else do we have to do --

MR. BAILY: Yes.

MR. GREIFELD: Besides dominate high technology.

MR. BAILY: Right.

MR. GREIFELD: So, I could see that as a valid question.

MR. BAILY: Yes, there was a question over there.

MR. MITCHELL: Thanks and thanks very much. I'm Garrett Mitchell and I write *The Mitchell Report*.

And I'd be interested to know back to this group of chief executive officers who are of one mind about the need to reduce the deficit and get the debts down so that the capital market and other things, capital markets perform the way they should. To what extent can you tell us beyond the overarching goal of let's get the deficit and the debt down, to what extent would this group of 350 or whatever it is agree on the steps by which they would prefer this to be accomplished?

And what I'm really interested in is whether -- I think one could say of the Congress many things, but one could say of the Congress on this the Congress is of a mind that we need to get the deficits down and reduce our debt and fix the ratios, et cetera. It's when you get down to the details of whether you do it through revenues and expenditure cuts and which ones, et cetera, where the impasse comes, and I was just curious to know whether you have a sense that the CEOs have thought through it enough. As they drill down, there are some specific steps that they either have or would be willing to endorse to sort of help Congress get where it needs to get.

MR. GREIFELD: Well, let me start at kind of the macro part of that question, and that is I think the CEOs, one, are pragmatic people and when you hear political debate which is basically binary, we don't relate to that. All right, and that you always have to go to middle ground, right? So, those in business know, you never get entirely what you want in any negotiation, so, some middle ground. So, clearly, in this debate, middle ground has to be some balance between spending cuts and revenue increases. So, for those on the right who want it one way and those on the left, the other, the CEOs will come somewhere in the middle.

What that ratio is, I don't think the CEOs are of one mind, whether it's two, three, four to one, one to one, we don't know, but there has to be some ratio. And, so, I think that the statement of the CEOs saying yes, there should be revenue increases then separates them from some of the hardline positions taken by others. And the willingness of the CEOs to say yes, to have an increase in our individual tax rate is acceptable in the context of an overall deal is something that I think has uniform agreement.

Beyond that within particular policy deliberations, you probably have a little more fragmentation in terms of viewpoint. Certainly, the goal of the corporate tax code for now to keep it revenue-neutral and to broaden the base I think has wide support, not unanimous support, and obviously those who benefit from certain exemptions are probably less supportive of that, but I think it's wide support there.

I would also say that there's wide support to go for a territorial tax system and this is one of the things that I get excited about because it does beg common sense and it pains me to have that money be offshore knowing that it will never come back and to use it in some other way.

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So, the deeper down you go, the more fragmented it gets, but I think the unanimous aspect of it at that macro level is quite substantial in this day and age and that's a clear message we can deliver.

MR. BAILY: Yes, a question there.

MR. MILLER: Hello, Clem Miller of Wilmington Trust Investment Advisors.

I'm wondering how you would compare the debt situation, fiscal situation in the U.S. to that of the Eurozone since NASDAQ operates both sides. Is it more challenging here than there? Is it a greater potential magnitude of disaster here than there? What would you say?

MR. GREIFELD: Yes. Well, one is I would say most of our operations in Europe, with the exception of Finland, are outside the Eurozone. So, we have the Swedish krona, the Dane krone, the Norwegian krone, and also in London, we have the pound. So, they're probably not unhappy of our positioning there.

Finland adopted the euro. I should say Finland and also some of our Baltic countries are adopting the euro probably a little bit late in the game there. But this country has so much more fundamental strength than what you see in Europe and our train of destruction would be slow motion.

So, with respect to our fiscal capability, we're probably 10 to 15 years out from running into the problems you saw in Europe, and when I say "10 to 15 years," that's probably from a mathematical point of view. Understand that as we all learned in 2008, emotions can make things happen a lot quicker than that. So, we're in a fundamentally different and better place than Europe, but let's not kid ourselves that Europe is a roadmap from where we were on and we're on that train to Europe right now, and it's a

question of we're here, we're knowledgeable, we're forewarned, let's get the political will to do something.

MR. BAILY: The fact that Europe's is in a debt crisis, does that make our situation more dangerous? Is there a sense in which it's more urgent for us to deal with our problem?

MR. GREIFELD: I think so. When you look at what you'd expect to see for GDP growth in 2013 going to 2014, we know we're in an interconnected, global world. So, to the extent that you have a recession in Europe and a slowdown in growth in China, that just puts more pressure on our economy and it will put more pressure on our GDP growth there.

And, again, our concern is that we're lulled to sleep by fantastically low interest rates.

MR. BAILY: Yes.

MR. GREIFELD: As somebody who's just refinancing his mortgage, I

mean, it's a wonderful thing, but it's definitely masking the pain in some fundamental way.

MR. BAILY: Yes, it's not my line, but we're sort of the favorite horse in the glue factory.

MR. GREIFELD: Yes.

MR. BAILY: Because we look better than Europe, so, people buy

treasuries.

MR. GREIFELD: Yes, and when you look at it, so, we're a rating company, so, we go in front of S and P to get our rating and it's a fairly rigorous process, and I say that if the U.S. government had the same process to go through with respect to its credit rating and what it did with the debt ceiling showdown, it wouldn't have a rating

that would give it an interest rate of 1.6 percent on the tenure. It's disconnected from reality at that point in time.

MR. BAILY: I think there was a question there and this will probably be the last question.

MS. KIRBY: Hi, my name is Alyssa Kirby.

I was wondering what your thoughts are on the effects of necessary bailouts on the national debt, specifically in regard to insurance companies and the insurance companies not being able to make their payments on either natural environmental disasters or otherwise.

MR. GREIFELD: Okay, well, I can't say I'm up to speed on that issue, but, so, you're saying insurance companies are not able to meet the cost of Sandy or --

MS. KIRBY: Yes, or in the future in regard to other natural disasters -but specifically more on your thoughts on bailouts and the effect on national debt.

MR. GREIFELD: I'll make one comment on the insurance industry; it's hard to see that we don't need national regulation for the insurance industry. We certainly have it for the securities industry, for the futures industry, and it does have advantages. And in classical U.S. fashion, we have the SEC, but we still have state security regulators, but at least we have an oversight body there.

So, to the extent that the proper regulation and it ties back to financial industry, you obviously have to have the proper reserves in the insurance industry. And I would say with respect to bailouts, when you look at the financial world, and this is what we're still living with in the aftermath of 2008, it's a job of the policymakers to create an environment where they don't have to do bailouts, right? To the extent there's a bailout, that means there's so many safeguards along the way that weren't there or weren't the proper safeguards.

So, the financial world, the debate is okay, do you separate the investment bank from the commercial bank today and Francis was talking about that today. You have the Vickers Report in the U.K., which deals directly to it. We have kind of a watered down version of that here in the states with systemically important organizations. So, I say clearly what happened in 2008 is a wakeup call for policymakers to make sure that whatever business is, present a risk, some sort of systemic risk to the economy, then that's the fundamental, proper role of regulation to make sure that is in some way firewalled, and, so, it doesn't cause contagion in the world today.

MR. BAILY: Thank you so much for coming and talking to us.MR. GREIFELD: Definitely.

MR. BAILY: So, we appreciate it. (Applause) Thanks to Glenn for being here and being such a good teacher, obviously, and thank you, all, for coming.

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