NEW YORK STATE
2016 ECONOMIC AND REVENUE CONSENSUS
FORECASTING CONFERENCE

State Capitol - Room 124
Albany, New York

February 25, 2016
1:30 p.m. to 3:30 p.m.

PRESIDING:

Robert F. Mujica Jr.
Budget Director, NYS Division of the Budget

PRESENT:

Senator Diane J. Savino
Chair, Banking Committee,
and IDC Member of Senate Finance Committee

Senator Catharine Young
Chair, Senate Finance Committee

Senator Liz Krueger
Ranking Minority Member, Senate Finance Committee

Assemblyman Herman D. Farrell, Jr.
Chair, Assembly Ways and Means Committee

Assemblyman Robert C. Oaks
Ranking Minority Member, Assembly Ways and
Means Committee

Robert B. Ward, Deputy Comptroller
NYS Office of the Comptroller

Good afternoon.

I'd like to welcome everyone to the annual Economic and Revenue Consensus Forecasting Conference.

My name is Robert Mujica, Director of the Budget.

Joining me today at the joint economic revenue consensus forecasting panel are:

To my right, Senator Catharine Young, Chairman of the Senate Finance Committee;

Assemblyman Herman D. Farrell, Chairman of the Assembly Ways and Means Committee;

Senator Diane Savino, Chair of the Senate Banking Committee, and member of the Senate Finance Committee;

Senator Liz Krueger, Ranking Member of the Senate Finance Committee;

Assemblyman Robert C. Oaks, Ranking Member of the Assembly Ways and Means Committee;

And, Robert B. Ward, Deputy Comptroller.

I'm pleased to be presiding over this panel for the first time.

Today's conference represents the first step in what we all hope will be a smooth process towards another on-time balanced budget.

Each member of this panel will have the opportunity to provide brief opening remarks.

Afterwards, we'll hear testimony from a cross-section of experts who will offer their perspectives on the current economic and revenue situation.

Let me begin with some positive news.

New York State's main-street economy is doing quite well.

We have been seeing some of the strongest rates of private-sector job growth since the heady days of the high-tech Y2K bubble, but this time, without the bubble.

The state economy has become more diversified and less dependent on the financial sector.

Our construction sector, professional and business services, and tourism-related industries are doing well, and many of the jobs being created pay solid, middle-class wages.

Of course, we also know that not every New Yorker has been able to share in the relative prosperity, so we continue to work on this issue.

Also, the New York State economy is highly regionalized, and some parts are still trying to recover from the job losses that were lost during the last recession.

We've come a long way, but there still remains a lot to do.

Of course, we also know that, despite our recent successes, the financial sector still contributes disproportionately to the state's revenue stream.

By our estimates, both this year's and last year's bonus seasons were either flat or down.

And if the volatility we're seeing thus far this year continues, we will fully expect that it will, next year's bonus season could be even worse.

And those forms of non-bonus income that are also important components of our revenue base, such as capital-gains realizations, will also likely be negatively affected next year.

Because of the lag between economic activity and the revenues generated by that activity, we will likely not see the full impact of these recent developments until well into the 2017-18 fiscal year.

National economic growth appears to be stuck in a low-growth rut.

For sure, some areas of domestic economy are doing well: autos, housing, and restaurants.

But we have, virtually, recession-like conditions in the energy sector and the manufacturing outside of the auto industry.

Just as the U.S. was poised to take its current place in the world's leading liquid-energy producer, the Chinese economy, whose energy needs at one time seemed insatiable, began to slow.

As they say, timing is everything.

We seem to be living in a world where low oil prices have become a net negative for the U.S. economy instead of a positive.

Who would have thought that was even a remote possibility five years ago.

Global economic conditions remain grim, helping to strengthen the U.S. dollar, and as a result, corporate earnings have been generally dismal, particularly in the export and energy sectors.

Unfortunately, those businesses that are most affected by these adverse conditions are disproportionately represented in the major stock market indices.

Equity markets noted, my first few weeks as budget director, with a 10 percent correction in the middle of the Wall Street bonus season.

Not ideal conditions to begin budget discussions.

We all know that the Federal Reserve has finally embarked on a path towards interest-rate normalization, and, historically, there has been a shift in monetary policy.

New York State, the home of the world's financial capital, will be disproportionately affected.

Again, we look to the panel for guidance on the timing of the future Central Bank actions.

Recent events have demonstrated how sensitive markets can be to the shifting expectations surrounding Federal Reserve policy, and the resulting market gyrations are likely to have a larger impact on the state economy than the nation as a whole.

So while some numbers are quite strong -- our economy now has more private-sector job growth than ever before -- for example, we must remind ourselves that significant risks remain.

Thanks to the greater diversification of the state economy and prudent state budgeting practices, we are weathering the weakness in bonus payouts without too much difficulty this year.

Thanks -- that said, this is exactly the right forum for acknowledging that adding uncertainty to our income and revenue projections, and we must resolve to plan accordingly in the future years.

So it is against this backdrop of economic uncertainty that we embark upon this revenue-consensus process.

It is important to note, that while there are differences in our forecasts at a fundamental level, there is broad agreement that New York State faces substantial risk, given the nature of its revenue base.

We will need to take the types of responsible, necessary actions proposed in the executive budget, on both the revenue and spending sides, to strengthen New York's fiscal condition.

For five years we have worked together to enact on-time, fiscally-responsible budgets that embrace the principle that state spending must grow slowly -- or, slower than the national economy.

With the establishment of the 2 percent spending benchmark, the unsustainable trends of yesteryear have been reversed, and we are seeing measurable improvements in the state's financial position.

By controlling and managing spending growth, we have reduced the need to engage in overly-aggressive revenue projections, and all parties deserve credit for this responsible budget-making.

I am particularly interested in hearing from our expert panel as to when global conditions can be expected to significantly improve, and when we can expect the benefits of low gasoline and heating oil prices to more than offset the negative impacts to our economy.

We also would like to hear your estimates as to when equity markets might be expected to bottom out.

Each of the forecasts before us today represents a good-faith contribution to the consensus process.

Looking ahead, I know that we are all committed to meeting the statutory March 1st deadline for a consensus revenue agreement.

Revenue consensus is an important component of achieving our shared goal of a timely and responsible enacted budget.

And at this point, I'd like to offer to the other members of this panel an opportunity to make their opening remarks.

Senator.

SENATOR YOUNG: Thank you.

Thank you, Budget Director Mujica.

And, I also welcome the State Legislators and our distinguished panel of experts here today, and everyone who is in attendance, as we go over our annual conference on economic and revenue forecasting.

As you all know, we're here to listen to the testimony of our invited guests panel of experts, in order to have that testimony help our fiscal committees reach a consensus forecast on the economy and tax revenues.

We are eager to hear your views on the status of the economy, Wall Street, and the state, in general.

The Senate and the Assembly fiscal committees have now released our economic and revenue projections for the remainder of the current fiscal year, and for state fiscal year 2017.

And you have been provided with those forecasts.

This conference is the important first step to helping the two houses of the Legislature and the Division of Budget come to an agreement on a budget -- I guess the Governor is part of that too, right? -- by helping to come to an agreement on revenue.

After we reach a consensus on revenues and other available sources of funding for fiscal-year 2017 budget, the legislative budget process can commence working through the details of various appropriation bills and Article 7 bills as we approach the start of a new fiscal year.

I have to agree with Budget Director Mujica about the path of fiscal responsibility that we have been on for the several last years, by controlling spending, but at the same time, we are looking in the Senate, as the majority, to invest in important programs.

Whether it's tax relief for New Yorkers, creating jobs and opportunities, investing in education and transportation, all of these are important to New Yorkers in improving their quality of life.

And so we look forward to working together to make things happen.

Again, I would like to thank the members of the panel for taking the time out of their schedules to be here with us today.

I look forward to the analysis and insights that we will receive from you.

And I would suggest that, today, we in the Legislature and representatives of the Governor, begin, in earnest, the discussions which ultimately will lead to another on-time state budget.

So thank you very much.

ROBERT F. MUJICA, JR.: Thank you, Senator.

ASSEMBLYMAN FARRELL: I look forward to hearing the panelists, your thoughts on economic outlook for both the state and nation, with a particular focus on your views about the outlook of New York State's economy and the increasing risks we face, going forward.

I am particularly interested in hearing your assessment as to how the unbalance of risk for the national and state economies will affect New York's fiscal outlook.

This analysis is important to us as we look to gauge the economy, and to act as effective as possible.

Your independent viewpoints, along with today's discussion, help to provide a solid foundation as we discuss and debate various aspects of the budget.

And I look forward to being here and hearing your comments.

Thank you.

ROBERT F. MUJICA, JR.: Thank you, Chairman.

Senator Savino.

SENATOR SAVINO: Thank you, Budget Director Mujica.

I'm very pleased to be here today with my colleagues and our new budget director.

And on behalf of Senator Klein and the members of the Independent Democratic Conference, I want to thank all of the panelists for joining us.

We look forward to hearing your thoughts on the outlook for New York State, and the economy, more generally.

As the national and state economies continue to expand in the aftermath of the great recession, there is still uncertainly as to how widespread and sustainable the recovery in New York State will ultimately be.

We continue to be concerned about weak economic growth in the housing markets.

And in New York State, we continue to see that wage growth still lags behind the national pace, and the unemployment rate is expected to remain at 5.5 percent.

This slow economic recovery, coupled with the exorbitant costs of everyday life in New York, continue to present a challenge to working New Yorkers.

The Independent Democratic Conference believes that this is a persistent problem that requires the State's attention.

It's also important to remember the broader context in which we're working, because there are still many risks threatening the state's recovery.

New York's role in the national economy means that disruptions at the national and global levels can have an immediate impact on the state.

Declining oil prices and slow global economic growth have caused volatility that could threaten New York's recovery.

Therefore, today's discussion will be crucial in assessing the realities of our economic situation so that we can develop an understanding of how to best move forward to face our challenges.

The consensus that we're confident we will reach will lay the foundation for passing an on-time budget that will allow the state economy to continue growing, and will enable New York's working families to prosper.

We are eager to begin laying the groundwork for that process, and to hear the input of all of our panelists in that regard.

Thank you for your participation.

ROBERT F. MUJICA, JR.: Thank you.

Senator Krueger.

SENATOR KRUEGER: Thank you all for being here today.

I think that, pretty much, all the introducers have raised exactly the same issues, so I don't think I need to give a speech.

Thank you.

ROBERT F. MUJICA, JR.: Thank you, Senator.

Assemblyman Oaks.

ASSEMBLYMAN OAKS: Yes, I would just like to say, thank you, for all of our panel to be here today.

For me, this is -- we depend on a lot of internal information, and us processing things, to try to get to the end product.

I think today is the opportunity to hear some expert advice, and to hear if we're on the right track, or we're off.

As far as the Assembly Minority, we -- we're very close in a lot of the numbers to what the Governor has put out. Sometimes we come off a bit more than that.

But I know that, for us, we see, you know, just policy-wise, that, tax cuts, we have some middle-class tax cuts that ought to become permanent.

We have some on higher earners that might -- are set to expire.

The question of whether that should be done, we would agree that they should, to help stimulate.

And, also, giving our small businesses predictability of our -- what our tax structure is. And we always tweak it some.

But, always looking forward to hearing your input, so that we, as I said, get -- can get to that final -- our target date of the end of March for a state budget.

ROBERT F. MUJICA, JR.: Thank you, Assemblyman.

Bob Ward, do you have anything, Deputy Comptroller?

ROBERT B. WARD: Comptroller DiNapoli has observed that, although the state's fiscal position currently is strong, there is rising uncertainty about economic conditions that we are watching closely.

The report on the executive budget that the comptroller released yesterday, included cautionary comments about the prospect of slowing revenue growth, and the possibility of increasing budgetary challenges for the state, in coming years.

We look forward to learning more from the informed analysis of the economic experts gathered for today's meeting.

ROBERT F. MUJICA, JR.: Thank you, Bob.

So we'll start with the presenters.

Michael Jacobs, from the New York City Independent Budget Office.

MICHAEL JACOBS: It's on?

Okay.

I'm a little concerned. I had a handout I was going to be talking from, and I don't have a copy in my blue folder.

Is it, somewhere?

They were being printed up earlier, so they exist.

My presentation will be easier to follow with some of the numbers.

Okay.

Just keep in mind, I'm going to be presenting an outlook and a forecast that we produced in late November.

And a lot of the more specific forecasts of growth and employment, income and output, are a lot more optimistic than either what, you know, is currently warranted, given problems in the -- the output problems in the last quarter of 2015 and the financial-market uncertainty.

So, you know, this is what we were thinking a couple of months ago.

We're actually in the middle of revising the forecast. I can assure you it's not going to be quite as optimistic.

So, with that caution in mind, let me present some things from our forecast that we had done.

The first is, New York -- and I'll be concentrating on New York City.

New York City's economy has outperformed the nation's economies since the end of recession, in, both, that the severity of the recession was not as great in New York City, and economic -- and economic growth and employment was quicker to recover in

New York City.

And the second page of the handout has some projections of real GDP growth.

Again, I think we're way optimistic in terms of national growth.

I don't want to say that, you know, I -- we are going to -- how much we're going to reduce it, but it, clearly, will be reduced.

Employment growth is -- has been pretty phenomenal in New York, whether you measure employment growth by taking the average of one year over the average of the preceding year, or, to forward to Q4, as I prefer to do it.

We've had two years in a row where we've added 100,000 jobs. And, the growth -- employment growth rate is, clearly, stronger than the U.S. at large.

That is probably not going to continue in the near future, as the forecast values we have indicate.

Also, the unemployment rate was slower.

And this is one area where New York wasn't do so -- New York City was not doing so well. The unemployment rate did not fall as quickly or as -- as steadily as the U.S. unemployment rate did for the first few years of the recession. But, after 2013, there's been this -- there has been a fall in the unemployment rate.

Page 3, you'll -- just to repeat some of this stuff:

The annual increases in employment have averaged close to 100,000 jobs a year.

In recent years, the last two years, or -- there have been -- there's been a decline of the unemployment rate, from -- you know, by nearly 3 percentage points.

And what's -- what's indicate -- what the strength of the labor market has indicated, by the fact that the labor-force participation rate also rose at this time, you'd think with more people entering the labor force, it would be hard for the economy to generate the jobs to absorb them.

But, clearly, New York City, in at least the last two years, has been absorb -- finding a way to absorb those in the labor force, or at least a large portion.

The unemployment rate is still higher than the United States as a whole.

And, the labor-force participation rate has been rising in New York, while it's been falling on the U.S. -- in the United States as a whole.

Our job forecasts are certainly not for a continuation of $100,000 -- 100,000 jobs created each year.

We see slower growth in the -- both the national and the local economy, particularly the local economy, and, a decline in the number of jobs we will add.

Someone asked about the unemployment rate being stuck at 5 percent.

Probably will go under that.

We don't see a whole -- enough of a growth that it will go much below that.

And, I think the -- that we're pretty much at the end of -- or, at least end of an increase in the labor-force participation rate.

Slide -- the fourth slide has some comparisons of employment growth in various industries, in the years after the recession, and during the forecast period.

One of the bright spots, and someone, I think, referred to this, is that there's been a diversification of the -- the city's economy, still very dependent on the financial industry, but a little less so.

And one of the bright spots is that professional and business services has been -- has been adding jobs at quite a strong pace, and those jobs seem not to be tied to the fate of the financial industry.

And that's a good sign for New York City's economy.

Education and health: We believe education and health, which has been fairly -- growing fairly steadily, will slow down a bit, mostly because of constraints in health-care growth.

Leisure and hospitality has been strong, much to the surprise of a lot of us who thought that tourism was going to fall off, given the economic troubles, both, here, and after the recession, and elsewhere in the -- for foreign visitors.

The securities-industry employment has not been great in the last few years.

In 2015 it added, roughly, 2,000 jobs to the city's economy, but that's after years of either no growth or actual declines.

But, compared to the pre-recession expansion, from about 2013 through 2000 -- to the middle of 2018 (sic), they added almost 10 percent of all new jobs in the city.

That's not going to continue.

Growth we -- had started to resume again in 2015.

We expect there will be some growth in the future, but not -- not -- nothing like accounting for 10 percent of the job growth in the -- total job growth in the city.

If you go to the next page, we're -- we look at industry shares of wage growth.

While I should mention that, you know, in -- there doesn't appear to be much difference from the -- in the wage growth of the securities industry from -- in the last few years, to -- and what we're forecasting.

However, this contrasts with the securities industry accounting for over half, about 52 percent, of wage growth in the years leading up to the recession.

It's still -- you know, the share of wage growth has declined because of less employment growth, and a decline in real wages, though average salaries are still running around $400,000 a year.

So even with little -- little employment growth expected in the securities industry, its share of wage growth will -- is expected to rise.

Many of us look at the data that comes out of the New York Stock Exchange for its member firms as a general proxy for the health of Wall Street.

And I've -- here, I've compared the pre-recess -- some pre -- 5-year period before the recession, to 6 years since economic growth has resumed, and then 4 years of our forecast period.

The employment-growth numbers are actually not from the New York Stock Exchange. Those are standard numbers from the Bureau of Labor Statistics.

These are annual figures, so, we see that there's has been a, you know, great decline by about a quarter in the job growth in the securities industry.

Revenue has also shrunk. And, the net-profits numbers are a little misleading because of wild swings in the profitability of Wall Street.

When the recession started, there were two years of in -- of decreases -- well, not decreases -- with -- of losses by securities firms, almost 54 billion worth. And then there were two years where firms' profits totaled 89 million.

So, that 2 percent decline you see for the five years leading up to the recession is a bit misleading, as is the 18.2 percent of the following.

And the reason for this, for the, you know, relatively decent profits in the last few years, and we expect this to continue in the forecast period, is that interest-rate costs, net-interest expenses of firms, have been quite low, in comparison to what they had been leading up to the recession.

I talked about real wages decreasing. And, they have not -- they've -- they have increased a little bit since the recession, but nothing like before the recession.

We don't expect -- while we expect there to be some employment growth and some wage growth, it's, obviously, much less than before the recession.

You can call this a "new normal," if you'd like.

And we are also thinking that net-interest expenses will stay low because, yeah, the fed is starting to nudge up interest rates, but, it's, obviously, going to be doing so very gradually. And the interest rate -- the interest costs to firms will not be anywhere what -- like what they were before the recession.

I'm going to -- in the interest of time, I'm going to just, very quickly, go through some comments on real estate.

These -- the forecast data is not produced by our model. It's a little more of, I don't want to say subjective, but, informed opinion by the people in our office who look at the data carefully.

They believe that the sales growth of commercial real estate is unlikely to continue, that it's unsustainable for the next few years.

New records were set in 2015 of the value of commercial real-estate sales.

And the value of commercial real-estate sales, year to year, depends very heavily on whether there are these, you know, very high-end sales of $100 million or more.

The biggest sale last year was a 2.2 billion sale of the New York Telephone building in midtown.

So, we expect sales to decline in the near term this year, maybe into 2007 (sic), but then grew -- and then stabilize or increase a little bit.

Obviously, the role of foreign buyers who notoriously have been buying up a lot of property as a safe-haven for wealth is something that we're watching.

Residential real estate: The low interest rates have continued to fuel activity in the residential real-estate market, which didn't decline as much as the commercial market in the wake of the financial crisis; and, yet, the volume of sales is still, in this year's, it's just about equal to its peak in 2007. And that's in nominal terms, not adjusted for inflation.

As I said before, commercial sales are a function of -- unlike commercial sales, the volume of sales in residential real estate is more a function of rising prices than increases in the number of transactions.

We expect the value of sales to taper off in 2016, into 2017 and '18, although we also expected greater interest-rate rises than we're now predicting.

So, I'm not sure that will be borne out in the new forecast.

Next two slides have some details about residential real estate in Manhattan and outside of Manhattan.

And, at the back of the packet are some graphs, for people who like to look at graphs, of the median sales prices and sales volumes, both inside Manhattan and in the other boroughs.

I'm going to skip over those in the interest of time.

And I want to get to something that we did back in late November.

We're certainly not predicting a downturn or a recession in the national economy or in New York's economy, but, you know, there is concern over a possible recession.

The Mayor mentioned this in his introduction of the preliminary budget.

What we've done is a hypothetical exercise, is to take one of the recession scenarios, a very moderate recession scenario, that Moody's Analytics, formerly economy.com, has shared with us, and we fed it into our local model.

And, you know, reasons for concern obviously are, that we've had a long expansion. There's been -- the stock market instability.

Neither a long expansion or spare markets don't necessarily lead to downturns.

There are possibility of various shocks, which I'm sure the macro presenters will talk about.

But, if you go to Slide 12, you'll see what -- where the declines -- how the declines in New York City's employment pay -- play out over scenario.

The recession starts in the beginning -- as we modeled it, starts in the beginning of 2016, and it lasts until the third quarter of 2017.

And, the graph is a cumulative job loss from -- from whenever that recession starts.

And we've -- we've made -- we -- the graph compares the severity of the projected downturn, in this hypothetical exercise, to previous downturns.

It's a little more severe in terms of the number of job losses than the last recession, but, it's nothing like the much greater job losses that occurred in the recessions that began in 2001, and 1990.

So, by the middle of 2017, we expect the city's economy to have lost about 168,000 jobs, and that's almost two -- 250,000 less than the base -- our baseline forecast, than -- the difference between the job loss under the alternative scenario and the job gains we have in our baseline forecast.

Finally, I just -- I know this is a meeting about economic forecast, but I thought it might be useful to look at how this hypothetical recession plays out in terms of city taxes.

The least sensitive tax is -- at least in the next few years, is the property tax of because -- largely, because of the byzantine structure of New York City's tax system, where you have four classes of taxes, you have constraints and phase-ins of assessment growth, you have limits to changes in the share of total liability or -- that each class bears, and a few other change -- a few other constraints.

Of the more sensitive taxes, obviously, would be income taxes, both personal and business income.

And, as measured as a percent of the baseline forecast, we would say that property tax -- property-transfer taxes -- the mortgage-recording tax and the real-property transfer tax -- that's the most sensitive, in terms of as a percentage of baseline forecast.

The declines in all of -- of the -- the declines in revenue increase over a two-year period, as was said. You know, economic downturn doesn't immediately affect the revenues hit -- the revenue hit plays out over time.

Our model suggests that the greatest hit is -- or, the peak of the revenue loss is in two years from the start of a recession.

And that's -- that's about it.

I would be happy to answer any questions, now or later.

ROBERT F. MUJICA, JR.: Any questions now?

No?

Okay. We'll go on to James Diffley, from IHS Economics.

JASON BRAM (speakerphone): Hello?

JAMES DIFFLEY: I've got -- glad to be here again. Thanks for inviting me once again.

I've got a presentation packet for you there.

So I'll go over --

JASON BRAM (speakerphone): Am I on?

JAMES DIFFLEY: -- U.S. macroeconomic forecast, and move on to the regional --

ROBERT F. MUJICA, JR.: Hello?

JASON BRAM (speakerphone): Hello?

JAMES DIFFLEY: Is he on -- oh, there you go.

ROBERT F. MUJICA, JR.: Jason?

JASON BRAM (speakerphone): Oh, am I next, or am I not next?

ROBERT F. MUJICA, JR.: Are you ready now, Jason?

JASON BRAM (speakerphone): Oh, I'm ready, yeah, if you guys are.

ROBERT F. MUJICA, JR.: Okay. Go ahead.

JASON BRAM (speakerphone): I'm sorry. I didn't mean to interrupt, Jim.

JAMES DIFFLEY: That's okay.

ROBERT F. MUJICA, JR.: Go ahead.

JASON BRAM (speakerphone): Okay. Can everyone hear me?

(Multiple people say "Yes.")

JASON BRAM (speakerphone): Okay. Great.

So if you want to -- I assume you have the printout. If you want just to follow along on there, I'll try to be quick, to leave a decent amount of time for the macro folks.

First, let me say that the views that I express are mine, and not those of the Federal Reserve Bank of New York or the Federal Reserve system.

I'm going to go through this presentation, but some of what -- some of what's on these charts has pretty well been covered by Michael Jacobs there, so I'll kind of speed through some parts of it and -- where appropriate.

So the first chart refers to our Federal Reserve Bank of New York business surveys, which we've been doing monthly for a number of years.

The Empire State Manufacturing Survey, as you would gauge from the name, covers manufacturers in New York State.

The Business Leader Survey covers service firms, largely, in New York State, but also in northern New Jersey and southwestern Connecticut which are parts of our district.

And, these are fairly good indicators.

You can see that, going into the 2008-2009 recession, they both went down pretty fast and pretty hard.

There have been some other, I don't want -- I guess we would call them "false signals," that the late 2012, you'll see a big drop in the service-sector index. That was right after "Sandy," understandably, but things sort of snapped back.

And, now, in the last six or seven months we've had a very deep and protracted slump in our manufacturing index, which has been at its lowest level, and for the longest time, since the 2008-2009 recession.

And we found that a little bit disconcerting, except that our service-sector index seemed to be holding up. But that also fell in February, to a -- to a -- sort of a -- not a disastrously low level, but to a level below zero, which is kind of the break-even point.

To give you some intuition, for those of you aren't familiar with these surveys: The concept of these diffusion indexes are very, very simple, in the sense that it's, basically, the percent of people that say things are getting better, minus the percent that say things are getting worse.

So when you have an index reading of below zero, that suggests that more people say things are getting worse than better.

That's all it says. It doesn't say anything about the magnitude.

So, this is -- this is a sort of a warning sign.

We're not that concerned yet, because it's only really been one month that the service-sector index has been weak, but it's something that we're definitely watching.

The next chart is on a regional-activity index, which is a composite measure based on employment, unemployment, a measure of hours, and a measure of wage and salary earnings. And these are then blended together and smoothed, and re-trended, to create a measure that's supposed to sort of mimic economic -- the level of economic activity.

And as you can see here, New York State has bounced back pretty strongly, and New York City has been exceptionally strong.

These indexes, by the way, are all based on the beginning of the national recession, which was in late 2007, at 100.

So what it really means, is that New York City's economy, if you take it literally, has -- is -- is -- is up -- is up more than 25 percent from where it was before the recession, and New York State's is up a little more than 10 percent more, if you take it literally.

And, yeah, you probably noticed there's been a little slowing in New York State.

That's probably reflective of hours, and some weakness in the manufacturing sector.

We're not too concerned about that, but, again, it's something that we're watching.

Now, the next chart looks at private-sector employment trends.

Again, these measures, so that we can put them all on the same scale, are indexed to the beginning of the recession.

And you can see that the -- much to, I think, to a lot of the -- our regional economists' surprise, the recession wasn't nearly as steep in New York State or New York City as it was nationally.

And you can see that New York City has come roaring back quite strongly, and New York State as well, and, again, it's, largely, due to New York City.

New York City's had its strongest boom in decades, at least in terms of employment.

And then New York State, of course, has also been outperforming the nation in terms of the comeback.

Now, before I go to the next few charts, you know, one of the -- New York City has been exceptionally strong, compared to the nation, compared to the rest of the district, and so forth.

One of the things that we're looking at, as a sort of long-term trend that might be supporting this, is -- is this sort of urbanization trend; that is, you know, through a good part of the twentieth century, you had this gradual migration of people, and then businesses, from central cities to the suburbs. And, more recently, there seems to be have been somewhat of a reversal of that.

Now, it's not clear how much of this reflects changing preferences, how much of it reflects elevated energy prices, because, you know, you spend a lot less on energy in a New York City, for example, apartment than you would in a house out in the suburbs.

I don't -- I don't -- and now, obviously, that's important, because now energy prices are much lower, and the question is: Does that then tilt that balance in favor of the suburbs versus the city?

I don't think that that's as big a factor as the other parts of it, but, again, that remains open to be seen.

But, New York City doesn't seem to really have slowed much at all, going into the end of 2015.

And I should add that, you know, with benchmark revisions coming up soon, we look at the -- we closely track the data that the numbers get revised to, and it doesn't look like -- (speakerphone failure) -- you know, weaken at all.

In fact, they may even make it look slightly stronger, the trends in New York City, and, to some extent, New York State.

So these are -- these are very, very, you know, positive developments.

The next few charts are a look at sort of different parts of the -- within the region -- within the state.

I'm not going to get into much detail, but you can kind of look them over yourself, and I'll be more than happy to take questions at the end.

But, basically, I think the big take-away is that downstate is -- has done better than upstate in terms of job growth. But, upstate has not done too badly relative to other business-cycle recoveries.

So, for example, if you go -- I don't know what number chart it is -- it looks like it's about Chart 6, maybe:

You can see that Buffalo has actually outperformed the U.S. in terms of where it is relative to before the recession.

Rochester has done reasonably well.

And these are areas that have typically underperformed, consistently, the nation. And they've underperformed it, in part, because you don't have population growth at the same rate as in other parts of the country, and so forth.

And then we see that Syracuse is lagging a bit.

The next chart, you see that Albany, largely, reflecting the tech boom there, has done pretty well.

But, again, most parts of Upstate New York, it's really a mixed bag. You have some laggards, and some areas that are doing really well.

Binghamton and Elmira, which are old manufacturing hubs, have been very weak.

And then one -- one which was, for some reason, missing from the downstate chart, Long Island has been doing pretty well. It's been pretty much tracking along with where the nation is.

So, Long Island is performing about average.

Now, in case any of you have lost track of which chart we're on, moving into this -- what we call a "bubble chart," it's not -- "bubble" has nothing to do with, you know, housing or financial bubbles. It's that the actual data points look like bubbles.

Just to make that clear.

And the way this chart is set up, it's a somewhat complex chart, but, really, it's -- the way to look at it is that, each bubble, each dot, is an industry. The size of the dot reflects how big it is.

And we're focusing here on Manhattan.

We could do this for New York State, we could do it -- you could it for any one of a number of regions, but since Manhattan is such a core part of the state, especially in terms of revenue, we're -- I just thought I would focus on that here.

And you can see that the securities -- so the -- the right-to-left axis, or, the -- the industries on the right, are the ones that are very highly concentrated in New York City.

So, for example, securities has about 10 times the share that it would nationally in New York City.

And then -- then the firm -- the businesses on the left are -- tend to be underrepresented in New York City -- in Manhattan.

And then the vertical axis simply indicates how they've done over the last -- from 2009 to 2014.

So, basically, what you want for your region or your county, or whatever, is you want industries in the upper right and lower left, because the upper right means it's very important there, and the fact that it's high up reflects that it's growing rapidly.

And then the industries that are on the left tend to be underrepresented here, and they're shrinking or underperforming the average.

So this -- this kind of points out that the securities industry, and some of the others which are very important, have not really been drivers of growth. But things like Internet publishing and motion pictures, and then some aspects -- some parts of the professional and technical services, have been -- are fairly important for New York City and have been driving a lot of the growth.

So let me -- let me focus in a little on the securities industry, which I think Michael Jacob summed up pretty well, but I'm just going to show you a chart here -- a couple of charts.

The first one shows, over the last few decades, that each boom and bust in New York City's economy has been preceded, or, you could argue, driven, by booms and busts in the securities industry, or, Wall Street.

And the gray-shaded areas are downturns in the securities industry.

And you can see that each -- each upturn and each downturn, pretty much, has been led by the securities industry; that is, the securities industry turns, and then the rest of the economy turns.

There are -- obviously, these two are on opposite scales.

The interesting thing about this last recovery expansion is that, it's been one of the strongest, probably the strongest, certainly, I don't want to say in history, but, certainly, in the past half century.

As you can see from this chart, the "gold" line is outside the securities industry, is sort of the rest of the economy.

And, it's really quite surprising how well the city's economy has done with, really -- without any help from its key industry, which is securities.

And if you go to the next chart, it just sort of zooms in on the past few years, and you can see that, you know, it's been driven by, pretty much, everything but securities. Not everything, but a lot of different industries.

And so the next question that might come across your minds is: So if Wall Street's not driving it, what is?

And you have a lot of different, mostly service-based industries, and, specifically, health and education, leisure and hospitality, retail.

And one thing that those industries tend to have in common, is that they tend -- not all of them, for example, not so much education, but, certainly, retail and restaurants, and so forth, tend to be low-paying industries.

And so what you see is that, the mix of job growth has not been favorable in terms of total wage and salary earnings; and, thus, in terms of total revenues.

But, because the overall employment growth has been so strong, it's sort of -- it's sort of helped offset the fact that you have this shift in the mix of employment.

And, then, we also did -- we did a report on this last year, we looked very closely at New York City's tech sector. And that's been a pretty -- as you remember, the Internet publishing, and other industries that we considered to be sort of tech industries, have been growing very rapidly in New York City.

They're not nearly as important here, for example, as they are in places like Silicon Valley, Route 128 in Boston, Seattle; but, nevertheless, they've been growing very rapidly, and they've been not an insignificant contributor to overall job growth and earnings growth.

And then, to sort of try to wrap up quickly, the last few charts refer to the housing market.

The first one kind of points out that Upstate New York didn't really have, if we went back, you know, before 2006 -- again, these are indexed to the peak of the housing market in 2006 -- Upstate New York didn't really have a huge housing boom, or a bubble, or whatever you want to call it. And so when the housing bust came, it didn't really have a big bust.

Not so much true, obviously, not for the U.S.

And New York State, and downstate and New York City, obviously, did get hit, but not as hard as the nation.

Obviously, the nation includes, you know, a lot of places like Florida, like California, the -- what they call the "sand states," which were particularly hard-hit.

And so New York State -- and so Upstate New York has done pretty well.

Downstate New York has come back.

New York City has done a lot better than the suburbs around New York City, and, as a whole, the metro area is kind of, you know, inched its way back up to where it was before the recession.

And then the next couple of charts, again, I don't want to get into too much detail, but it's really remarkable that Buffalo has been the leader in terms of the housing market.

Now, obviously, in terms of the level of home prices, it's still a long shot from, you know, New York City or, pretty much, anywhere in Downstate New York. But, nevertheless, there's been more home-price appreciation in Buffalo than in the rest of the region, and also more than Buffalo has probably experienced over this long a time, in -- in a long, long time.

Let me just -- let me just mention that these -- the home-price indexes we're using are core -- it's an organization, CoreLogic. They look at repeat sales, and, they have a model that kind of -- it -- so what you are looking at, in theory, and, hopefully, in practice, is how much the same home would have sold for.

It's not affected, like some of the median home-prices indexes are, by shifts in the mix within Buffalo.

So, for example, if, suddenly, the high end of the housing market went dead, and a lot of low-prices homes were selling, it would look like median prices are going down.

That -- this isn't distorted by that. This is based on same-home sales -- similar home -- same-home sales.

And then the last one shows that there are parts of New York State, the Lower Hudson Valley, that have lagged, where home prices really have not recovered at all.

And the last chart is based on the -- we have a big database of mortgages, you know, the status of mortgages, across different parts of the country.

So if you look at New York State, we divide into downstate and upstate. I think the dividing line is somewhere around, like, Kingston.

So, I know everyone has a different definition of what "upstate" and "downstate" is, but I think the picture remains the same; and that is, that there's still a huge backlog of foreclosures in New York State.

And the reason for that is, not that it's a bigger problem here, necessarily, but more that properties remain in foreclosure for a much longer period than in the rest of the nation. It has to do with the judicial; the laws that govern how foreclosures go.

And so it's been coming down, but, it's still a pretty high stock, especially in Downstate New York. You see that over 5 percent of mortgages, at the moment in time, the latest point, which is late November, late last year, are in foreclosure.

And I think I'm going wrap up.

I'm -- I'm, you know, perfectly happy to take questions, whenever.

ROBERT F. MUJICA, JR.: Thank you, Jason.

Any questions for Jason?

No.

JASON BRAM (speakerphone): Okay. Thank you.

ROBERT F. MUJICA, JR.: James.

JAMES DIFFLEY: Again, I'm glad to be here.

So I've got a slide show of the U.S. economic forecast here.

I guess I'm the first this morning to talk about -- this afternoon to talk about the U.S. macro economy, so, we'll go there.

And I'm sure you and Chris will have a lot to say in response to that.

The summary is simply that, we think the U.S. economy is sound, but, it's being buffeted by global financial- and commodity-market turmoil. And we'll see how we expect that to play out in a second.

2016 is shaping up globally now as another substandard year.

Since 2012, the world economy has been -- which, previously, had been growing at 3 to 4 percent per year regularly, has been stuck between 2.5 and 2.6, 2.7, percent growth every year. And that's unlikely to change in 2016.

So, we've reduced our -- recently, our world GDP forecast to 2.6 percent this year.

We do see it coming up, though, in 2017, 2018, 3.1 percent, and 3.2 percent.

So that's important to note, going forward.

What's happening here that affects us?

The sluggish global economy.

The strong dollar.

All right? The strong dollar is a very important factor here this year, related somewhat to the price of oil, but, by itself, makes imports -- makes our -- makes for import substitution by American consumers more interested in buying imports, makes our exports less competitive.

And that's a huge factor, going forward.

Even in -- and, of course, in Buffalo, for instance, New York is affected by the sharp decline in the loonie, which I think is down to about 70 cents to the dollar, so that, no doubt, is affecting consumers coming across and visiting Western New York.

The service sectors in the economy are -- talking about the U.S. now, are expanding. We expect that to continue.

Manufacturing production, I'll come back to this in a couple of slides, is on decline a bit, and will continue, at least for the first half of this year. And you'll see why -- why in a moment.

But consumer spending's import -- supported, generally, by rising incomes, low inflation, and also low unemployment now in the U.S. The fundamentals are strong there.

Housing construction: The rebound in housing, from the great recession and the housing-bubble burst, continues to lag behind expectations, but it is continuing to recover. Prices are moving up. Starts are moving up, albeit slowly.

We expect pent-up demand from young adults, and improving credit availability, finally going forward, to boost that, but, gradually, over the next few years.

Growth in domestic demand for products and stabilization in commodity prices will finally lead to moderate gains in business fixed investment.

We think we're at the bottom now, okay, of what's been a commodities super-cycle. And we include oil prices in that, that oil prices have gone lower than we expected.

We do think we'll gradually come out of that, going forward, which will serve as a boost to growth.

As Director Mujica pointed out, oil prices seem high -- low oil prices seem, surprisingly, to be a negative to the U.S. economy.

We don't think they're, on net, a negative, but there's certainly a large sense now, that unlike decades of the past, that the U.S. has become an oil-producing nation. Right?

So low oil prices are not ambiguously good.

And there's certainly been a large negative response in terms of manufacturing -- the manufacturing sector, owing to the supply chain of oil and gas investments, and capital expenditure, which had been driving a lot of the U.S. economic growth earlier this decade.

So that's all pulling back. All right?

And we see that -- you'll see that in some regional slides, going forward -- as we go forward.

Okay. The next slide, we graphically show our real GDP growth has behaved, and how the growth in employment has behaved, and will behave, going forward.

The one thing you'll note here, GDP growth finally coming up to reach 3 percent, that "3 percent" line there, in the second half of 2016, but staying below it, going out in the near term forecast, through 2018, which, again, is a little surprising, as productivity growth has been lower we would have expected, and the economy is stuck in a bit of a lower-growth mode than we would have hoped a few years ago, as we finally came completely out of the recession.

The one thing I'll note, though, is that we're under 5 percent employment, not only in New York, as has been mentioned, but for the U.S., and the U.S. is even a little lower.

We're at, essentially, "full employment," in economist terms.

So we're going to see, and this is an important point in our forecast here, if you see the line graph here, employment growth is going to be slowing, all right, because we're not employing previously-unemployed workers. Okay?

So normal demographic growth and labor-force participation is going to slow the rate of growth.

We see that in the U.S., our U.S. forecasts.

We're going to see it significantly in our New York forecast, which, if you looked at the comparison graphs, is the key difference -- or, table, is the key difference between our forecast and the rest of the panelists, I think, generally.

Although, the IBO did have a fairly low employment rate for New York City, going forward.

On the next slide, we show the Institute of Supply Management Index.

And there we see the distinction, as has been mentioned before, the service sector recently -- if you look to the right of the graph, the service sector behaving in increase -- with increase in demand, but manufacturing sector having turned negative.

Again, the high dollar effect on exports, import substitutions, negatively affecting manufacturers in the near term.

The table on the next slide shows real GDP, and the components of real GDP, out for the next three years.

Real GDP growth: 2.4 percent in 2016. 2.8 percent in 2017. 2.6 percent in 2018.

I'll note, the consumption line, the second line, is near 3 percent for the period, and higher than GDP growth, so it's contributing a greater amount.

Also, notice at the bottom two -- two rows, you see exports and imports fast -- faster growth, finally, in exports in 2017, but, very sluggish growth in 2015 and 2016, while the imports are relatively strong, because that's the effect of the strong dollar, and the effect of the trade imbalance on U.S. domestic demand.

Other key indicators on the next table include industrial production.

Notice, 2016, negative 0.4 percent in the measure of output of our manufacturing firms.

I'll point out a couple of other.

Light-vehicle sales, which has been a strong spot in the manufacturing economy, with some benefit, particularly that -- to Western New York, to be sure.

Jason mentioned Buffalo's relative

performance, for instance.

But we think that's peaking.

New-car sales of about 18 million are about as high as we're going to get, so we increased rapidly to 2015, 2016, but that's going to level off. Not decline, but level off. It's not going to be contributing to further growth.

"Housing start" line, you can see how slowly it's come up, and will come up to what we think is a normal level by 2018, of 1.5 million new units in the U.S. All right?

Again, slow -- approaching that level much slower than we would have guessed back a few years ago.

The CPI, very restrained. 0.1 last year. 0.6 this year. But then reappearing, at some level of inflation, in 2017 and 2018, a moderate level, of course.

If you're interested in our oil price, we see it, notice, for Brent level, $39, averaging, in 2016; 49 in 2017; 59 in 2018.

That's a very volatile forecast, I'll admit, but we certainly put a lot of effort into trying to get that right, but recognize the -- the uncertainty of that.

The fed fund's rate, the Director asked about -- I guess about that. I should answer that.

I mention that the fed will be cautious in raising rates this year -- the first bullet -- the first slide's bullet mentioned that -- more cautious than we previously had thought.

A few months ago, we would have guessed that the fed would raise rates four times during 2016.

We've now reduced that to two, all right, in light of the current sluggishness.

So the -- but our end result is that, in 2014, the fed fund's rate average was 1.4 percent, low by historical terms.

So, the fed's going to take a very cautious, gradual process.

If you turn to the next slide, "Risks to the U.S. Forecast," the colored slide, I think is important.

We normally talk about scenarios of either greater optimism or greater pessimism.

At this point, we think about the possibility of a mild recession. Give it a probability -- relatively low probability of 20 percent.

If there's even weaker global growth and a stock market plunge, or further stock market plunge, could push us into a mild-recession scenario.

On the positive side, productivity growth has been slower. And it's very much a matter of debate as to how we're measuring productivity growth, and why it's slower. But suppose that accelerates, that would be a positive outcome, as well as home building picking up faster than is the case in our baseline forecast.

If you turn to the next graph, the next slide, you'll see the implications of those two scenarios playing out.

And what I want to focus on is the gap between the red line and the green line, how much a difference it would make in real GDP growth in late 2016 under those different scenarios.

So there's a wide range of possibilities there.

But the bottom line is that, while growth will continue to disappoint in 2016, we think it would take a lot more pain and stress to push the global economy, include -- and, especially, the United States, into recession. Okay?

We turn to the regional outlook.

I show, in the first map, the employment picture as it appears. And there will be a re-benchmark, as somebody mentioned earlier, coming up in a couple of weeks from the BLS.

The south and west are returning to the lead in employment growth in 2015, very much a pattern, where the southern states and the western states are growing -- are growing faster, which is -- was the typical case before the great recession. And they were states that were more dramatically negatively affected by the housing boom and bust, in many respects.

That's, apparently -- returned to normalcy, in that sense, is apparent.

That's one of the reasons we have relatively low New York forecast, going forward, as I mentioned.

Migration flows to the sunbelt have reappeared.

They stalled in the housing boom and bust, particularly the housing bust, and also in the recession.

We see in the 2015 data from census that that's now returned. Florida is attracting a lot of New Yorkers again, as is Arizona. And the same is true, generally, for the rustbelt versus the sunbelt.

You notice the middle of the map is not so bouyant in 2015.

Again, that's the part of the country that really is an oil producer.

Texas's growth has been cut in half, essentially, nowhere near a recession, because Texas has such a, you know, high fundamentals. But, a significant negative impact on Texas.

And North Dakota is certainly in a recession, and that that's, obviously, a special case.

What do we see, going forward?

On the next map, in 2016, again, that sunbelt prominence continues.

New York is somewhat in the lower part of that.

Let's turn to the -- if you turn to the next slide, I'll describe where we are -- well, I won't describe it here.

Let me talk about New York versus the rest of the economy, though, in a minute.

In New York State we have achieved, as others have mentioned, particularly in New York City, high growth.

The job growth at the end of the year is about 2.1 percent per year, which is stronger by

1.7 percent for the year.

In the fourth quarter, it was 22nd among states, so in the top half, but in the middle for 2015.

Downstate, however, did exceed the U.S., as Jason and -- Jason and others have pointed out.

And, indeed, Buffalo, as has been mentioned, and in the very near term, Syracuse and Utica, actually performing very fast, as we go to the end of the year.

Unemployment, notably, is below 5 percent across the state. Across New York State, 4.8 percent, on average, across there. And 26th, right in the middle, across -- among states.

Okay. If we go to the -- the one thing I'll mention here -- well, I'll wait for the bottom line to mention the construction surge in New York City, which I think was focused on somewhat indirectly earlier.

But let's go to the -- the following slides here.

The -- the graph shows our -- for -- history and forecast for New York and jobs versus the U.S. and New York unemployment rate.

And here you see the strong performance of the state now, versus the U.S,; the blue versus the red line. And, the unemployment rate coming down consistently since 2011, to under 5 percent now.

As we go into the forecast period, we do have, and we would have noticed in the tables for the U.S., a slowing -- as I mentioned, a slowing in the U.S. rate of employment growth.

We also have the slowing -- even deeper slowing in the New York rate of employment growth.

That's because we've reached, in our view, we've got a mature stage of the recovery and growth.

We've reached full employment, essentially. And labor-force growth here is much less than it is in the rest of the U.S.

And that's why -- what's generating less than half a percent employment growth in the out years for the forecast.

So that's a very significant difference -- difference with the others, as I mentioned.

Jason had a good rationale for why New York City growth has been high in a way that, if the "new normal" is for increasing demand for urbanization, you might consider the New York City rate of growth could continue to be higher.

That's a big question mark, and a very

important question mark in anybody's forecast, going forward.

I'll point out, though, that low -- that low employment rate of growth goes along with a healthy economy. The unemployment rate remains low. It's not laggard. It's just moving at the normal rate of -- that you would expect for a healthy New York State economy, all right, which is, full employment, essentially, but at a relatively low rate of growth, owing to demographic trends, compared to the nation, say.

The next graph shows income, in that scenario, following the U.S., but lagging behind the U.S. a bit. And this is total income, and it includes non-wages, as well as wage income, which causes some deviation in the line there.

Wages -- one of the other benefits of the low unemployment rate is that wage growth finally grows -- per worker, grows a little faster than it has been, which has been generally sluggish across the country, as most of you know.

The bottom line for New York:

Labor markets tighten -- are tightening, have tightened -- and job gains are going to slow, with wages rising with low unemployment. That's the good side.

New York City is leading, although, as was mentioned before, not by finance.

The construction boom, importantly, it has been mentioned, but I'm sure the previous panelists know, that includes the outer boroughs. Brooklyn's been fantastic. And Queens and The Bronx are seeing construction too.

A large spate of multi-family starts in the city, owing to the expiration of a tax credit, that I'm sure you're aware of, and is of some question, that influences the numbers you'll see on the next table in a second.

But we've seen Manhattan and Brooklyn values soar.

I think the Director mentioned Wall Street bonuses being flat for a couple of years.

And I'm taking this quote from somebody in the financial sector earlier in the year about "flat" being the "new up."

And so it's a good thing this year -- we thought it was a good thing this year when we found out that bonuses were, essentially, flat, and were not going to decrease by 10 to 20 percent, as had been rumored earlier in the year.

I don't know how, exactly that's played out, and we'll see when we analyze the tax data.

I'll add, the construction of the Tappan Zee Bridge being the single largest infrastructure project in the company (sic), and applaud that.

And I mention here, Jason was surprised about Buffalo, but the "Buffalo Billions" are well -- well touted in Western New York, and Buffalo is at least seeing some strong optimism after many decades of relative decline.

The -- the last chart shows the table of New York economic growth, by fiscal year, going forward, through 2018.

I guess I'll point out, you'll see the employment line, showing the decline by fiscal 2018.

And, housing starts, the last line, you'll notice there's a spike to 63.1 in fiscal 2016. That's owing to the surge of permits and starts when the tax was set to -- when the tax exemption was set to expire.

But I'll also point out, 63.1, we express these things in annual rates. So that's 63 for the quarter, as though the whole quarter had been -- was converted to an annual rate.

So if you want to get the actual number of starts, you divide that by four, on average.

So with that, I'll wrap it up.

Glad to answer questions later.

ROBERT F. MUJICA, JR.: Thank you.

Hugh.

HUGH JOHNSON: Yeah, thank you.

Usually I'm the most optimistic of this group. It's, in part, congenital defect, and it's, in part, based on analysis.

But I think compared to what Jim just gave you, maybe it's going to sound like I'm pessimistic.

I'm not pessimistic. I still am trying to preserve somewhat of a lean towards optimism, but maybe it's not quite as optimistic as Jim.

I commend -- the one thing I would -- and I say, and people think I say this sort of gratuitously, is the work that's being done by all of the staff -- I'm, of course, very familiar with the staff of the Assembly, the Ways and Means Committee -- is just remarkable. They're really, really working hard. And, you can see it by their documents. The detail, the level of detail, in the analysis is really -- is really incredible.

And not only is it incredible, but it's

extraordinarily important to coming to up to -- with a good forecast for New York.

And as a result of that level of detail and that level of analysis, they can come up with reasonably good forecasts for revenues.

The -- as -- I've worked with this group before, and enjoyed it, and very much appreciate being invited back to share some thoughts with you.

As you know, or may know, what I try to do is, I -- I look at the performance of the financial markets, I look at the performance of important monetary and economic variables, to try to determine where we are in the current -- current cycle.

There have been 10 cycles in the post-war period.

We're on the 11th cycle, a cycle which consists of three parts: a stock market cycle, accompanied by an economic cycle, accompanied by an interest-rate cycle.

And I have found that my work, our work, that the financial markets perform in specific ways, is beginning, middle, and the end of that cycle, as to the important monetary and economic variables.

And, so, if you can determine where you are on that cycle, it's very important for making good investment decisions, but most -- very importantly, good decisions as -- as policymakers.

But most important question you really face, I mean, it's really almost the only question you face right now is: Has -- have we reached the -- the end of the bull-market economic recovery, and are we about to see a recession?

In other words, is the 7 1/2 percent or so decline that we saw in stock prices since the beginning of the year, the start of a bear market that's going to be accompanied by a recession? Or is it simply a correction in an ongoing bull market, and that we're going to see further gains, both, in the markets, as well as the economy?

That is the single most important question.

Another subtle way of asking the same question, and this is very subtle, but very important, is: Will the recession that we currently see among the oil-producing, not only states, but companies, is that going to spread?

Is it going to spread -- and I should say agriculture as well, but is it going to spread to other parts of the economy; and, therefore, contaminate the entire economy?

Are we going to have an ongoing bear market, insidious bear market, that's accompanied by a recession?

To answer that question, I look at the financial-market variables, and then, also, the monetary and economic variables.

You look at not only the performance or trend in the stock market, but the trend in various sort of details within the stock market-sector performance, capitalization performance, performance of the bond market.

I can give you all this detail. I'd be happy to talk to you about this detail.

Believe me, it can put me to sleep. It would probably put you to sleep.

But, you look at all the variables within the financial markets to see what the message of the financial markets, and I say the bond market as well, which would be the yield curve-quality spreads, a lot of technical stuff.

The message of the financial markets, collectively, is overwhelmingly clear; and that is, that we have reached the end of a bull market.

We've reached the start of a bear market, and it's going to be accompanied by an economic recession.

Pay particular attention to the performance of the financial sector of the financial markets which has been performing very poorly.

I have a chart in there that shows you what the pattern of performance of the financial sector is, going into a recession, and coming out of a recession.

And you can see that the pattern is, as you might suspect, going down -- relative performance going down prior to a recession, and improving prior to -- prior to a recovery.

This is consistent with what Jason said, which he talked about the financial sector. I think he was looking at employment performing well before the recovery, or as a leading indicator of the recovery.

The point being is, that the message of the financial markets is clear.

And the question is: Is that rational?

Is it consistent with a rational forecast for the economy: earnings, inflation, and interest rates?

And I hesitatingly say this, but I would say it is not consistent with the performance of important monetary and economic variables.

Clearly, you see that the Federal Reserve has been very accommodative, even though that they've raised interest rates once, and are likely, who knows, to raise interest rates two, three times, who knows, in 2016.

It's data-dependent. Nobody up here knows the answer to that question. It would be simply a guess.

I would guess three times.

You've heard two.

You've heard one.

You don't know.

But Federal Reserve policy is, and is likely to continue to remain, accommodative, even if they raise interest rates three times in 2016.

As a result of that lending is very strong.

Total bank lending, lending to businesses, is very solid.

Lending to finance real-estate transactions in New York State or throughout the country, very solid, very, very strong.

The lending to finance consumer transactions, consumer lending, very strong.

As a result of that, as a result of the strong lending by the Federal Reserve, money conditions are really good.

Yes, the growth rate of the money supply has slowed some, but there's enough liquidity, shall we say, to drive both the -- both the economy and the financial markets.

As a result of some of those performances, some of those monetary and economic variables, a lot of the detail of this, what I'm talking about, is in my handout.

I don't want to you get bogged down. I mean, there's nothing worse.

But, I'm just covering, sort of, generally speaking, what it says.

And because of the good bank lending, because of pretty good monetary growth rates, leading indicators, on balance, have been performing well.

Now I should add, very importantly, that they've actually -- leading indicators which, of course, are indicators from the conference board and others, that tell us where the economy is going, not where it's been, they've actually declined in three of the last six months.

And, that's a little bit troubling.

There's a lot of ways of looking at them, diffusion index. There's a lot of ways of analyzing leading indicators.

I think when they run into trouble, we start analyzing in all these different ways, to try to make a good story out of what might be a bad story or a troubling story. And, I'm guilty of that.

And I think, on balance, after I do that kind of analysis, I come away with the conclusion that, yes, it's troubling to see indicators that lead the economy or tell us where the economy is, going run into a little bit of trouble.

But I think, on balance, still the message of those indicators is that the economy will continue to expand through 2016, and probably into 2017.

So the answer to the most important question of -- which is, "Is this the start of a bear market, a long and insidious bear market, that will be accompanied by at recession?" is, no.

This is going to be a correction in an ongoing bull market -- a correction, I hope, in an ongoing bull market -- that will be accompanied by a continuation of the recovery through 2016, 2017.

It is not at all unusual, in financial-market history, and this is important, that they had very sharp, even sharper than we've seen, corrections or declines in stock prices that were not accompanied by recessions.

1987.

1994.

1997-98, everybody kind of remembers the southeast Asia financial crisis, long-term capital management.

I would be happy to talk to you about those.

They were really troubling, really severe, to -- sharp decline in stock prices.

2011-2012, when we had the European sovereign-debt problem or crisis.

So there have been declines in stock prices without a recession.

And, in my judgment, this is going to be very similar.

That's what the outcome this time is going to be, very similar. But it is going to be, in my judgment -- and this where a little pessimism comes in -- it's going to be, in my judgment, a very close call.

Got to watch the numbers, as was said so many times, and watch them -- watch them very closely.

In this -- in this paper that I've given to you, I've also detailed, or quantified, the forecast. Not just simply, broadly speaking, given you my idea of what's going to be the outcome, but quantified the forecast.

Let me say just a couple of things about the numbers.

First of all, again, the numbers are pretty close from everybody. I mean, you know, this is coin-flipping, but, the numbers are pretty close.

But there's a couple of things that you should know about those numbers, which -- which, in my -- my view, are very, very important.

First of all, as has been sort of said, the -- the -- we have -- we've reached what economists call "full employment."

And so, the gains, the growth rate, if you may, but the gains that you're going to see in non-farm payroll employment, in the gains in the unemployment rate, are likely to become somewhat more subdued.

I looked at the consensus forecast for the economy as measured by, this one is Bloomberg surveys: 231,000 jobs added to payrolls each month in 2015; a hundred eighty-one, 2016; a hundred sixty-three, 2017; and, in 2018, if anybody can guess out that far, 149,000.

Unemployment rate coming down, continuing to come down, but not in the leaps and bounds that we've seen in the last few years, at 5.3 in 2015. 4.8, 4.6.

What this also implies, as the consensus forecast and my forecast shows, is that, although -- and this is where you and I differ a little bit, Jim -- is that the consumer spending should continue to expand, but at a slower and slower and slower pace.

So, 3.1 percent in 2015, 4. -- 2.7, 2.5, and then 2.4.

Now, this -- this is pretty important, because it carries with it some important implications for the New York State economy and for New York State tax receipts.

I've got some numbers in there on tax receipts, and what's troubling to me, but I think this is important, is that receipts for the 2016 fiscal year -- personal income tax, sales tax -- they look really good.

That's already in the bag, pretty much in the bag. But they slow significantly for fiscal year 2017.

So I'd be pretty careful, because I think this is very consistent with what I see going on in the national economy, the numbers I just went through.

In other words, the revenue forecast that I had in here, suggesting a slowdown in the growth rate, and, actually, a negative number for personal income-tax receipts for the fiscal 2017, minus .3 percent, I think that should be -- in other words, I'm really strongly recommending a lot of caution.

I see that also show up in my housing numbers.

Yes, housing's a big, pretty solid part of the economy. Probably the best part of the economy that I can -- that I'm looking at.

But, there, the growth rates of residential real estate and the GDP accounts come down, 8.7 percent in 2015, which is a good number, a strong number, real. 7.1 percent. And then 4.9 percent in 2017.

So the whole pattern, when you look at -- the numbers are all pretty close.

The pattern is, that things are going to become a little bit slower as we move through 2016 and 2017, and that will show up -- I think, that will show up in revenues.

Stock prices; you asked the question about stock prices. You wanted to hear what the prospects were for stock prices.

There are two things that drive stock prices.

One is earnings. And the other is price-earnings ratios, or, what people will pay for those earnings.

The growth rate of earnings is negative in 2015, a lot because of energy.

In 2016, it looks like it's going to be breakeven. Maybe down .5 percent.

And at 2017, we're talking, like, at about a plus 2 percent growth rate, in -- whether we're looking at corporate earnings or S&P 500 earnings, the numbers are about the same.

Those are not particularly inspiring.

The second thing is, the Federal Reserve is going to be leaning towards restraint. Whether it's one time, three times, I don't know. But when they're raising interest rates, it puts a little bit of downward pressure on price-earnings ratios.

It is very hard to make the case for really good stock markets in 2016 and 2017.

If you were to -- if you were to start -- use as your starting point, the average price in 2015, fourth quarter, you get almost no change in stock prices for 2016 and '17.

The good news is, if you want to call this good news, is we've had a sharp decline in stock prices, so we're not starting at the average of the fourth quarter of 2015.

We're starting at an average, which is considered our price, that is considerably lower than that, so that we're now, as I do the arithmetic, this is very grandiose, 7 1/2 percent undervalued, with the upside potential in the stock market from the current level, of being 9.9 percent through the end of 2016, and then we flatten out again.

The point is, is that -- you know, is that if it was isn't for the volatility, which has created an opportunity -- and I don't want everybody to rush out and call their broker now -- but what I'm trying to say is -- because this could easily be wrong, but if it wasn't for the opportunity that's been created by the current, quote, crisis, it -- it -- the prospects for interest rates will be rising a little bit, stock prices would be level. But, now, it's created somewhat of an opportunity, which might make you feel really great about the stock market.

But, in my judgment, the prospects are really not all that great.

A couple of -- couple of points on this forecast, and I'll be brief.

First of all, I've done this sort of as whimsy, but turns out to be pretty good research -- well, it's not good research. It's whimsy.

The consensus forecast for the national economy tends to pull in one direction during the two-year forecast period.

The -- it tends to either start too high, and just goes down for the whole two years, until it gets it right in the last month, of course, when you've got all the numbers. Or, it starts too low, and it goes up.

And the consensus forecast is now, about, 2.1 percent for 2016, and it's been trending lower.

And that means that, 2.1 percent -- I'm hoping, I'm crossing my fingers, that's where I am, I hope it's right -- but if that pattern continues, it's probably going to come down a little bit.

Another reason for being a little bit cautious about 2016.

So, that's one thing.

The second thing which I would sort of

mention in passing, you know, the average growth rate of the economy, from 1980 through the -- before 2009, in positive expansionary orders, was 3.7 percent.

In this recovery, it's 2.2 percent.

The reason is, as I see it, the growth rate of the population has come down considerably.

The participation rate, or the percentage of the population that's actually in the labor force, or working or actively looking for jobs, has come down considerably.

And as has been mentioned, productivity has been very dismal. The growth rate of productivity is low.

I know I heard your numbers, but, getting a growth rate of above 2 1/2 percent is really hard when you take this all into consideration.

So that's a kind of structural problem that the state of New York tends to mirror, or walk in march step -- in lockstep with the U.S. national economy.

It's going to be hard to get the kind of growth rates we all would like to see.

So -- so -- so that's important.

That's the structural problem.

And the cyclical problem is that, we've reached full employment, and it's going to be --

So, the point is, I'm saying, you know, go easy.

Let me see.

A couple other things -- well, let me say the other -- other thing.

It's going to be hard -- the -- the -- will this recovery just end of old age?

That's another question that keeps coming up.

You know, (unintelligible) simply, well, you don't have a good reason for the recovery ending -- recession starting. Maybe energy's fine, and all that.

Will it just end of old age?

That question has been asked, and it's been studied very, very extensively.

And the answer is: No, it is not going to end of old age. There has to be a cause for the recovery ending and a recession beginning.

As has been mentioned already, probably the principal cause of the problem, the thing that we face, which is the big risk, is China.

It's very indirect, but it's -- the slowdown that we've seen in China can get transmitted around the world, as well as to the U.S., through four primary transmission mechanisms:

Psychology. Declines in China -- declines in the stock market in China to scare everybody around the world, they go down.

The most important being commodity prices and trade flows.

And, there are six countries in the world that -- that over 33 percent of their exports are commodities.

Think about this: Canada, Mexico, Brazil, Indonesia, Russia, and Australia.

If you add China to that package, that's 45 percent of U.S. exports.

If you're asking the question, "Can the slowdown in China get transmitted around the world, and can it affect the U.S.?" it certainly can affect the U.S. It does gets transmitted. It doesn't happen in isolation.

That's another reason to be a little bit -- a little bit troubled, or a little bit concerned.

But as I say, I still don't think that's going to be enough to turn an economic recovery that we're currently experiencing into something that will be called a "recession," or something that would qualify as a recession.

I'm going to finish up by just mentioning a couple things.

I -- the oil price, I think, I'm -- I -- I -- I have no idea is going to happen to oil prices. I wish I knew.

I forecast $65 today.

Believe me, I work pretty hard at forecasting oil prices, and I really think I got some great models going, and they -- they're been just continuously wrong.

But, it feels very much like we're as much at an emotional extreme in oil as we were in 2008 when the price got to $140 per barrel, and everybody was forecasting $200 per barrel.

Well, that didn't happen.

And we've gotten down to 30, and it seems like an emotional extreme once again.

So, I'm crossing my fingers and hoping that oil -- that you're right on your forecast for oil prices, I would take that.

That's -- I'm going to finish right there.

The most important question --

I think I've covered all that I wanted to cover.

-- was really that question is:

Is this a bear market, or is this simply a correction?

Are we going to see a recession, or not?

And I think the answer to that question is: No, but there -- but it's going to be a close call.

And I think that when you take a look at the details of your forecast, your economic forecast, and everybody is pretty close, make sure that you're coming down on those growth rates, not only for employment, but on the unemployment rate, as well as consumption, and also -- and also housing.

And that has -- carries with it significant implications for tax revenues for the fiscal 2017 year.

I think that's about it.

ROBERT F. MUJICA, JR.: Any questions for Hugh?

SENATOR KRUEGER: We're all waiting till the end.

ROBERT F. MUJICA, JR.: Hugh, thank you very much.

Chris Vavares, Macroeconomics Advisers.

CHRIS VAVARES: Hi. Very good to be here.

Thanks for having me back.

I don't believe this -- is the microphone on?

Great.

So, I loved the prior remarks, especially Hugh's. I think he started with exactly the right issue.

We come down on the same side.

We think it's less of a close call, but I -- but we think we'll -- we're in a correction and we'll avoid a recession.

However, we did significantly mark down our forecast in the recent forecast round, and the primary reason was: If you go back a bit to the summer, when concerns bubbled up again about the growth of the Chinese economy, and how that was spilling over into commodity prices, and how the strong dollar was spilling over into emerging-market economies, all of that's led to increased pessimism about near-term growth prospects for the global economy. And that's reflected in stock prices.

And, so, we've seen a major additional leg down in equities in the U.S. market, as well as other global stock markets.

We -- and, of course, that impacts aggregate demand in the U.S. through wealth effects and through the cost of capital.

In addition, we've seen a sharp rise in credit spreads. Some of that's related to the low oil prices and the impact on high-yield bonds in the energy sector. It's also impacting banks; fear about banks' balance sheets, and the kinds of loans that they may have made to the energy sector, and what it will do to their ultimate profitability.

In addition, the strong dollar impacts corporate profits, as well as -- and, of course, that can spill over into investment. And, in addition, it disadvantages U.S. exports and advantages imports, and contributes to the additional drag we expect from that exports.

So all of these financial conditions that have worsened are working against the continued strong expansion that we've seen; "strong," if you like something a little north of 2 percent.

And, previously, we had expected that all of the -- this worsening of financial conditions, or at least the last few months of it, would be corrected at a fairly quick pace.

However, with some of the weakening in the data that we've seen, and with just a greater overall sense of pessimism, including the "R" word creeping into the lexicon of the media, making everyone, suddenly, a bit more cautious. And that caution leads to more risk aversion, and that risk aversion impacts asset prices.

And -- so all of that has led to us be more cautious about the rebound and improvement in financial conditions.

And as a result, then, we've marked down the growth of aggregate demand in the U.S. fairly substantially.

Now, there's a -- financial conditions are the things that control the growth of aggregate demand, and it includes bank lending, et cetera.

But the three or so things that I highlighted are, I think, quite representative of the overall, you know, dominate financial conditions as it imposes -- as it impacts the aggregate demand.

But there's yin-and-yang of financial conditions.

It's sort of what's imposed by market and market expectations and perceptions.

And then there's the fed who can do something to offset it, but, imperfectly. It doesn't control financial conditions, but it influences financial conditions.

So when financial conditions worsen, and impacts what -- the outlook for the U.S. economy, the fed responds to that, and it tells us it's data-dependent.

In the last survey of economic projections, the F1C was suggesting that the economy would grow, you know, north of 2 percent, 2 1/2 percent, something like that, and that that would be -- and inflation would gradually move to 2 percent, and that would be sufficient to have four fed tightenings in each year over the next three years.

And, so, that's what the DOTS chart showed us, and we had pretty much said, Well, believe the DOTS.

And that had been our forecast for the fed funds' rate.

However, as a result of the larger and more persistent weakening in the financial conditions, we don't believe that they'll be able to follow that path, and the next couple of surveys will show less of a rise in interest rates.

And so with that, we -- we're now expecting only two tightenings this year, in June and December.

They'll skip one, we believe in 2017, if our forecast -- if the economy evolves similar to our forecast.

And, finally, get to four tightenings in 2017 -- 2018. And that would be consistent with the very end of the year, December, with the fed fund's rate at two seventy-five.

So this is significantly below what's shown in the DOTS charts today. And we believe that, and market expectations will be coming down towards that.

Now, in addition, when we look at long rates, we know that the term premium has been squeezed to be significantly negative, most of that due to flight-to-safety issues as a result of all the global financial turmoil.

And we think, as things sort of get -- gain more traction, we get going again, we're likely to see that term premium move up towards zero, and eventually into positive territory.

So we can see long rates moving back up, rising from where we are today, around one seventy.

On the 10-year treasury yield, probably around, you know, possibly to two fifty by the end of 2016. And all the way up to something, like, closer to three fifty by the end of 2018.

So, long rates we expect to rise.

We do expect, eventually, a rise in all rates, and a flattening of the yield curve. And that's also predicated upon continued expansion.

Some of the factors that will lead to that continued expansion are that we do get the improvement in financial conditions from where we are today.

So risk spreads will narrow. The equity-risk premium will decline.

And that's really important, because the rise in rates is usually a significant headwind for equities, and especially during a period when, while we have growth, called "moderate growth," of corporate earnings, it's not great.

So we need that decline in the equity-risk premium in order to get continued increases in the stock market.

But for this year, we expect it to be a down market, down about 1 percent, and the S&P ending around twenty twenty.

For next year, we expect to be up about 3 1/2 percent, with the S&P ending about twenty eighty.

And, 2018, we'll end up maybe around twenty one seventy-five.

So not great years in terms of price returns on the S&P 500.

And, so, as we -- as we've already seen with the significant cutbacks in the financial-services industry, while at least these numbers are positive, they're not -- they're not that great, and so financial services will probably be under significant cost pressures.

Okay.

So, the other thing related to fed policy, I should mention, is inflation.

And, of course, the higher dollar and lower oil prices work in the same direction to lower inflation.

And there's a lot of inertia in the inflation process.

So once a shock pushes inflation lower, it tends to stay there, and only gradually be drawn up to towards the -- in this case, inflation expectations, which, thus far, appear to be anchored around 2 percent.

Unfortunately, when we look at the some of the measures of inflation expectations, whether they're survey measures or the market-based measures, say, from the TIPS market, the

5-year/5-year forward break-even inflation rates that we read from the TIPS markets, we've seen significant declines in the market-based measures of inflation.

And if that ends up spilling over into the survey-based measures, and, in, fact is, a true representation of what's happening with inflation expectations, then -- then we're in a kind of whole different world.

And Jim Bullard mentioned last night, that there's some credibility issues with respect to whether the fed, in fact, its 2 percent inflation target is remaining credible.

And, so, if -- if we don't see a pickup in the economy and see inflation begin to move back towards 2 percent, the fed is going to have to be more aggressive.

So we may see no additional tightenings out there.

So I think there's significant risk if inflation expectations become unmoored.

So I would put that as another, sort of, category-one risk, of seeing inflation not raise towards 2 percent, if those inflation expectations become unmoored and drift lower.

We do expect the unemployment rate to undershoot full employment. That's part of the story of why we think inflation will, in fact, move up towards 2 percent.

So we see the unemployment rate getting to 4.6 percent by the end of this year, and staying there, with overall GDP growth that's just a little over 2 percent.

So that's sort of the big picture.

The -- Slide 3 has some of the numbers. I don't want to spend too much time on that.

I want to call your attention instead to Slide 7 in my slide packet.

And, again, this goes to the notion of what are the -- what are the foundational elements of a scenario that has the economy avoiding recession?

And, here, it's the fact that fiscal -- the fiscal policy, and this includes both the state and local and the federal level, and not only taxes, but also government spending, so we pull all this together into an index of contributions to GDP growth, has moved from being a significant drag, as it was back in 2013, to a modest increase in 2014-2015. And we expect that there's still a modest boost to growth over the next three years.

So that's something that should be helping to sustain growth at 2 percent.

You go on to the next slide, I alluded to, you know, financial conditions are bad now, not universally.

I think Hugh pointed to some that were actually pretty good.

Extension of credit to consumers is one area, to be sure.

And that's reflected in this chart, in the blue line at the above.

It's the diffusion index of -- from the Senior Loan Officer Survey from the Federal Reserve, of banks' willingness to make consumer installment loans.

When it's positive, it means they're more willing in this -- on average, in this period, than the prior period, to extend those loans.

So credit growth is still looking pretty solid, and we don't have to really look any further than the credit-growth numbers themselves. They've been pretty solid.

But the red line is the B, double-A, spread over the 20-year treasury yield, and it has risen lately.

So that's that worsening of financial conditions that I described earlier. And, of course, that raises the cost of capital, and also impinges on credit flows into -- into both high-grade and in -- and -- and junk-bond debt.

So, that's not good, in terms of credit flow to the business sector. But we do expect that, as the economy regains traction, that those spreads will come down.

And then, finally, if you go to the next chart, we put the trio up there: the mortgage spread, the bond spread, and the equity-risk premium.

And the story is, that as those things come down, with -- at acceleration in both prices and GDP, cash flows are improving, the unemployment rate is a little lower, employment levels are better, consumers' balance sheets are continuing to improve...all of the factors that should lead to a less risky environment, you know, continue to unfold; and as a result, those risk premiums get squeezed, and that's a positive for growth.

If you look at Slide 10, this is the house -- this is the chart of the components of household net worth. It includes: All the consumer durables that folks own. All the liquid assets outside of the stock market. The stock market itself. Their equity holdings, both directly and indirectly. And then their housing wealth.

And all of that, that mountain of wealth, has been rising at a pretty good pace since the end of the recession. And even with the last couple of corrections we've had in the stock market, you see them as small divots in that mountains of household net worth.

So when you look at from it from this perspective, yes, it's not a good thing that we've had those declines, but it's not something that's going to derail consumer spending.

It may -- it may take the -- sort of the bloom off the rose a bit, but we're going to see it continue to rise.

The other factor that I want to address, that's come up a couple a times, is the impact of the oil-price decline on the U.S. economy.

If you look at Slide 11, this calculation is the contribution to real disposable income growth from the relative decline in energy prices.

So, when energy prices decline, it reduces inflation relative to what it otherwise would have been.

That boosts the growth of real disposable income, and that should flow through to consumer spending of, roughly, 70 to 80 cents. Or, you can think of a factor of 70 to 80 percent of these contributions to growth will show up in consumer spending.

Can we see it? Is it there it?

Well, it doesn't always come in with the same timing, but we expect that we will see it eventually.

It is consistent with an immediate rise in saving rate when gasoline prices decline. But then, laster, that saving rate declines as the spending -- real spending picks up.

And this has been positive. It will continue to be positive through most of 2016.

So that's another factor that we think will help to sustain overall consumer spending in this year.

I had mentioned the dollar is a significant drag on the economy.

If you look at -- oh, and, I'm sorry, one more thing on oil prices.

When we did the analysis to look at what the net impact was in 2015, we arrived at the conclusion that it was a slight negative.

And the reason was, that when oil price were falling from 110 to 70, there was not that much impact on domestic oil production, because oil production in the U.S. was still sort of economical above that price level.

But once you fell from 70 to 30, that $40 price decline went through and took out all of that tight oil and gas production, and it was no longer sensible to go out and explore at those prices.

The producers explore -- the wildcatters, if you will, couldn't get funding to do it, and so we saw rig counts drop off dramatically. And that then was reflected in a huge dropoff in business fixed investment in mine -- what's called "mining structures," of over $100 billion. And that was a big negative for overall GDP growth over most of 2015.

So while there was the positive impact from the boost of consumer spending, we felt that the impact on business fixed investment.

And as Jim alluded to, the downstream effects of that in the manufacturing of pipes and valves and pumps, all of that, was -- turned out to be a slight negative.

So, it was probably the first year in our history that a decline in oil prices was not positive for the U.S. economy.

For 2016, we see it as a slight positive, because we think, well, first of all, oil prices, we have rising from current levels, slightly.

Even with that, there's so much of a prior decline built in, that we're still going have the beneficial effect on consumers, and we're not really going see much change on the business fixed-investment side.

So probably a slight positive for this year.

Okay. On to the foreign sector.

We do expect that growth in the rest of the world has probably troughed, and is about to pick up. This is predicated upon effective policy measures in both China and in Europe, and elsewhere, with growth picking up, by this measure, from about 2 to 3 percent over the next year.

This particular measure is a trade-weighted measure using export weights of the United States.

So, it's focused on those countries that we do the most trade with.

But, the big headwind here is the sharp rise in the dollar, as I alluded to earlier. That that has caused and set off a string of declines in net exports, that we think will amount to about a half-a-percentage-point drag on GDP growth every year, as we go forward.

I want to then just go -- let's just go all the way to -- let's just jump up to Slide 20, since I talked about a lot of the other ones already.

So Slide 20 is our stock, S&P 500, forecast, along the -- with our forecast of the equity-risk premium.

And, I'll serve a good dose of humble pie here, and as Hugh does a great job of saying, don't believe these -- what do you say? -- don't believe these numbers, or something like that?

[Laughter.]

CHRIS VAVARES: You know, I don't have a great -- I don't have a great deal of confidence here, but at least there's a story; and the story is: That, you know, we -- the level of dividends, and the expected growth of dividends, consistent with the rise in rates that we have, and, with this kind of a decline in the equity-risk premium, is consistent with modest gains in the stock market, going forward.

And -- and that would be -- also would say that some of this is due to the fact that we view the stock market, as Hugh mentioned, as being somewhat undervalued today. Maybe not 9 percent. Maybe 5 percent.

But, maybe 5 percent undervalued today, and able to rise beyond that, given the growth of dividends that we expect.

And so I think I'll just leave it here.

ROBERT F. MUJICA, JR.: Thank you, Chris.

Okay. Do we have any questions for the panelists?

SENATOR KRUEGER: (Microphone turned off.)

How would you like it? Like, one at a time? back and forth?

ROBERT F. MUJICA, JR.: Yeah, you can just go ahead.

SENATOR KRUEGER: (Microphone turned off.)

Thank you.

Thank you, all.

Okay. So I do have a series of questions, and I'm just going to throw them out there, and anybody can answer, because I think that your information doesn't necessarily conflict with each other, although you approach things in different ways.

So, everybody was talking, to some degree, about, you know, the story of: Unemployment being better than it was. Likelihood of continued slow growth, as opposed to major retraction.

You had some charts -- I think it was James had some charts, showing --

(Microphone turned on.)

SENATOR KRUEGER: See, the light doesn't work, so I didn't know if it was on or off.

Thank you.

So, somebody had some charts showing that employment for New York was actually better than the U.S. average.

But then James had some maps showing New York State in a category where we actually fall quite a bit behind. I think it was in a dark blue, the best states, to, light blue, the worst. And we were in the light blue? I think it was your maps.

So, how does all that jive?

That compared to the U.S. average, we're better, but, it's all going to fall apart?

JAMES DIFFLEY: Well, no.

First of all, as a state, we're near the U.S.

average.

But I think the chart -- the earlier charts were focused on New York City; New York City being substantially better than the state average, to be even better than the U.S. But the upstate regions were generally lagging the U.S., and by a lot.

So our charts, I mentioned some -- our charts show New York in about the middle for performance in -- I show in 2015. But that would be the case over the 2010 to 2015 period.

In fact, better than the U.S., if we look back earlier in the decade, because the New York recovery was stronger than much of the U.S.

But, going forward, New York falls lower than the average by a bit, lower than the average U.S.

And that's largely driven by demographics, and as I mentioned, the predominance of high growth in the sunbelt, from Florida, to Arizona, frankly, and even Texas when it gets over the oil-slump issue.

So that's the relative connection.

SENATOR KRUEGER: So, also, people who follow unemployment data always talk about, there's the official unemployment rate, and then there's real unemployment. Right? And the numbers on real unemployment are much higher, when you look at underemployment, people who have given up on looking, new entries.

Is everybody's data working off of official unemployment rates and employment rates, or the more the category of what have they call "real employment" stats?

MICHAEL JACOBS: The last time I looked at the broader measures of unemployment, and those are official measures, too, that the Bureau of Labor Statistics has, counts one measure, including part-time people who want to work full-time, people that have given up on looking for work because they're discouraged.

There are various measures.

Last time I looked at it, which was, admittedly, back in November, there was a beginning of a decline in the U.S. of that -- or, more of a decline than we had seen.

So it's still high, you know, still not great, but, I think it's been moving in the right direction.

JAMES DIFFLEY: When we report the 4.8 percent that I mentioned a couple times, we're reporting the official rate, which hides the higher rates that you're mentioning, and it's called, from U-1 to U-6, which is much higher.

We're not ignoring them. We're just not reporting them.

They have improved over the last few years, considerably.

I can't tell you the rate of change in New York versus the rest of the country, offhand, on those, but -- but I'm sure it's better.

We recognize them.

There's a thriving debate -- there's always been thriving debate amongst economists as to what is the full employment rate of unemployment, the natural rate?

I'm arguing it's about -- that we're there, that we just got there, and it's 4.8 percent.

You and Chris might have a different number on that.

HUGH JOHNSON: I agree with everything Jim said so far.

I think the most important thing, and if you look at, depending on your definition of the "unemployment rate," they all kind of go together, so you can say, Well, gee, it's much higher. Isn't that horrible?

Well, it's the pattern.

It's whether we're getting improvement or not.

That's number one.

Number two, and it's the most important thing to me, and I think Jim explained it, when he talked about changing demographics, and the growth rate of employment in the sunbelt, is that the growth rate of employment in New York State, he has, and I also have, in 2016-2017, to be lower than the growth rate for the national -- the national numbers.

And I think that's the most significant, because that's what's going to drive consumer spending, income-tax receipts, in New York State.

That's why I come up with such numbers, but, basically, we're saying the same thing.

SENATOR KRUEGER: And this all ties into a -- my bigger follow-up question which I have, and I have another -- I have all these economists in the room and one on the phone.

So, one of the Governor's major priorities is an increase in the minimum wage.

And if you looked at this table, there are those of us who strongly support that proposal, and I'm going to guess those of us who officially don't support that proposal.

If we do what's proposed by the Governor, and I'm one of those supporters, what do you believe the impact is, or will be, on the -- not just the -- obviously, the wages will go up of workers, but, the impact on jobs' numbers and economic predictors for the state?

HUGH JOHNSON: I -- I -- I'll just say one thing, and rather than -- I don't even think anybody up here is going to want to touch that one -- but rather than touch it, I will say, I refer you, the Federal Reserve Bank of San Francisco recently has done -- they do really good work, their economists do really good work, because it's short, like four pages, and it's readable.

And they've recently done some really good work on that issue.

They come in where I come in, and they think it's, on balance, not a good idea, and, for a variety of reasons.

But the real bottom line is, that it, on balance, lead -- and it's a close call.

I know it's, politically, you know, it's feel-good, or, it's fair, or, the kinds of things you hear, said.

But I think it might lead to, on balance, somewhat of a loss of jobs.

And that's what they've concluded. And they really are doing that, totally, from an academic point of view.

So I think I would -- everybody is going to be different -- well, go ahead.

I'll throw it back.

SENATOR KRUEGER: Chris, I can tell you want to say something.

CHRIS VAVARES: I have a somewhat different view.

The Council of Economic Advisers did an extensive review of papers on the effects of the minimum-wage unemployment.

And they -- there was a great graph in there, where they showed the cluster -- a cluster chart, if you will, of the employment effects: positive, negative, zero.

The vast majority of them found, essentially, zero effect on employment.

There were a few negatives, a few outliers of negative, that often get cited by folks who are against minimum-wage increases.

A few positives who get cited by folks in favor.

But the vast majority were close to zero.

So, I think the preponderance of the academic evidence is -- is -- is close to no impact on employment.

But have you to consider where the state is.

And, like, are most of the minimum jobs -- minimum-wage jobs in the service industry, where those -- where those -- they can't really move them?

You can't move the deli from the corner of 53rd and Lex, and take it over to New Jersey. Okay? It's -- that job is not going to go somewhere else.

But are there below minimum-wage jobs, that if you raise the minimum wage, and states surrounding you have not, that those service-sector jobs, you know, could go somewhere else?

So I think that's the main question.

Do call centers -- well, they've all already left New York.

So, I mean, that's kind of the question I would ask, that could be something peculiar to the state and the surrounding states.

SENATOR KRUEGER: Anybody else want to jump in?

They're all, "No, no."

[Laughter.]

SENATOR KRUEGER: Would you all agree that if low-income people's income goes up, they tend to spend that in the economy immediately, as opposed to invest it in the stock market and then lose it in Apple stocks?

(Off-camera, several presenters say, "Yes.")

SENATOR KRUEGER: "Yes."

Okay. Thank you.

I think it was in Chris's chart, I think it was page 10, where you're showing household net worth, and you're breaking it down as continuing to rise, even though there was this glitch during, you know, the last recession.

When we look at lots of the data on the number of people who are living in poverty in New York State, and those numbers are not going down; the number of senior citizens, which is a growing population, living, literally, on their social security income, and nothing else, that chart seems skewed to me.

Is that because, when you take the uber-wealthy and you throw them in, they just skew everything up?

CHRIS VAVARES: Certainly that's part of the issue, but, we focus a lot on income inequality, but there's also a lot of wealth inequality, because of the concentration of wealth. And so the gains in the stock market that we've seen have driven a lot of, you know, increased concentration of wealth.

So they're consistent, but it's just a function of the concentration of wealth.

SENATOR KRUEGER: Anybody disagree with that?

JAMES DIFFLEY: And I'll add, not only stock ownership, but ownership itself, it shows up in that wealth -- that chart, but it doesn't affect poverty statistics.

HUGH JOHNSON: It's a substantial -- it's a substantial issue, and it's hard to answer that -- any of that. The income-inequality and wealth-inequality issue, it's really hard to answer.

It's -- I don't think many of us are very close to the answer.

But I think that -- I think a big part of it are -- are -- is -- is the exponential progress of technology and the loss of middle-class jobs.

They just simply don't exist.

And you see that, if you look at the

employment levels for all of the major companies, what they were in 1990, and what they are today, and they're half of what they were in 1990.

And you look at the number of jobs that have been outsourced to other parts of the world.

Now, those are coming back, because the arbitrage -- the wage arbitrage that used to exist, U.S. being flat, and wages going up in some places like China, a lot of those -- a lot of those jobs are being shipped to places like India where there's still is an income arbitrage. But some of them are coming back here.

So it -- believe me, the income inequality, wealth inequality, in my view, my view, and I love to hear others, will be solved over time if you're patient.

But I will also say that some of the work that I've seen done will not be solved by increasing taxes on the wealthy and increasing transfer payments to those -- believe me, I have a lot of sympathy for them, I really do, but I don't -- but I think we've proven that that doesn't -- that just doesn't do it.

The GINI coefficient continues to increase.

You know, you're familiar with that, aren't you?

All right -- all right. That's -- that's all.

SENATOR KRUEGER: So, I don't have as big a vocabulary as you do, but I actually don't agree with you on that. But we can have that conversation at another time. I would like to.

HUGH JOHNSON: I'd love to.

But tying into the other things you presented on, actually, I think it was in the Budget Director's presentation, you talked about the concerns about bonus-money income going down as a concern for the state. And several people highlighted that. In fact, somebody said that was -- you know, "flat" was the equivalent of "up" for bonuses.

I don't remember which one of you put that in your charts.

I was always taught we should be happy when we're not so dependent on Wall Street. That we're -- you know, that it's, like, okay, bonus stories change, but our economy is diverse, not overly dependent on one industry.

So, I look at that and go, okay, is that really terrible?

But, is that really terrible that we're seeing flat bonus money, which I guess means not as much of our tax revenue comes in.

I understand that was your point.

UNIDENTIFIED SPEAKER: No, my concern was that (unintelligible) revenue.

SENATOR KRUEGER: No, I understand that. And this is a revenue discussion.

But, objectively, on the big picture, should New York State be concerned if bonuses are flat and we're less dependent on the financial sector?

JAMES DIFFLEY: Well, to turn it, to combine this question with your question of inequality, if we -- if I were to report that the bonuses were flat this year because the income wage gains was distributed more broadly in the New York City economy, say, then, you would consider that a good thing, and you would consider it on -- on -- in the aggregate, offsetting, and not a problem.

However, I'm reporting that bonuses are down, but that money doesn't appear anywhere else in the New York tax-revenue streams. So, in that sense, it's a bad thing.

SENATOR KRUEGER: And, Michael --

MICHAEL JACOBS: A lot of the inequality

measures that have been pointed to, and I've done analysis of New York City tax returns, where, you know, capital gains is the predominant form of income for, you know, people, say, filers with over a million dollars, and it's a small portion of everyone else's.

The -- if can I say -- the -- oh, the income-inequality measures vary greatly, just with the fate of how the very wealthy are doing, very affluent are doing.

And the question is, whether or not, you know, everyone else is getting more money, or it's just the capital gains going to a certain small portion is declining.

So I think the way you put it was correct.

SENATOR KRUEGER: That was my question.

Thank you, Rob.

ROBERT F. MUJICA, JR.: Thank you, Senator.

Chairman Oaks.

ASSEMBLYMAN OAKS: Yes, I just had one question.

You mentioned labor-force participation, showed charts saying that -- I think they were New York City numbers, saying they had hit the top since we started keeping those figures.

Is that -- do we have figures on New York State, or nationally, on workforce participation, to suggest we are in that phase, or is that unique to New York City?

JAMES DIFFLEY: Generally, I don't -- I can't quote the figures, offhand, but we do have them.

There's also an ongoing debate about the fate in the, quote, new normal of labor-force participation rates.

Generally, across the country, labor-force participation has declined substantially since the pre -- say, pre-recession days.

Now, you can trace -- I think I can safely say, we can trace at least half of that to the aging of the population. Right? It's natural that 60-year-olds have a different labor-force participation than 30-year-olds. Right? And there's more 60-years-old than there were 10 years ago.

There's a debate as to whether the remaining changes are permanent or not.

We have taken -- and I've had this discussion with others on this panel -- the view that the decline in labor-force participation rates are somewhat behavioral, and are not going to turn around at least very quickly.

That's -- that actually is a part of our more pessimistic job-growth picture for the state, I will admit, that you can -- that that's an open -- somewhat of an open question.

HUGH JOHNSON: I have some numbers in my handout.

New York State, you can get from the census bureau, and then sort of a quasi participation rate for labor force, divided by the population.

And so you have to put them together.

But they're right in there, in my -- in my numbers.

ROBERT F. MUJICA, JR.: Any other questions?

No other questions?

Nope.

Thank you.

This concludes this year's Economic and Revenue Forecasting Conference.

I want to thank all the panelists for sharing your views. They'll be very helpful.

And, shortly, the economic and revenue staffs of both committees, and the executive, will be getting together to figure out, and hammer out, the revenue forecasts by March 1st.

So thank you, everybody, for coming.

JASON BRAM (speakerphone): Thank you.

(Whereupon, at approximately 3:40 p.m., the 2016 Economic and Revenue Consensus Forecasting Conference concluded.)