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THE ECONOMIC OUTLOOK

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BEFORE THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

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THURSDAY, NOVEMBER 17, 2016

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The Committee met, pursuant to call, at 10:01 a.m. in Room 216 of the Hart Senate Office Building, the Honorable Dan Coats, Chairman, presiding.

Representatives present: Tiberi, Paulsen, Hanna, Grothman, Maloney, Adams, and Beyer.

Senators present: Coats, Lee, Sasse, Cassidy, Klobuchar, Casey, Heinrich, and Peters.

Staff present: Breann Almos, Ted Boll, Doug Branch, Whitney Daffner, Connie Foster, Harry Gural, Colleen Healy, Karin Hope, Matt Kaido, Brooks Keefer, Christina King, Yana Mayayeva, Brian Neale, Brian Phillips, and Phoebe Wong.

OPENING STATEMENT OF HON. DANIEL COATS, CHAIRMAN, A U.S. SENATOR FROM INDIANA

Chairman Coats. The Committee will come to order. We are welcoming this morning Chair Yellen, the Federal Reserve Chairman.

I would just like to announce to my colleagues, and many of them will be filing in shortly, we have a hard stop at noon, both for the Chair's sake and we have a Senate vote at noon. So I will do everything I can as Chairman to give everybody the opportunity to ask questions of the Chair, but to my colleagues it's a hard stop so we're not going to be able to go beyond that time frame.

The Joint Economic Committee has a long tradition of receiving regular updates from the Chair of the Federal Reserve, and we are pleased to hear the Chair's insights once again before the Congress adjourns for this cycle in 2016.

While we have seen some encouraging metrics of economic performance over the past year, the next Congress and the next Administration will still face a number of challenges.

Eight years after a deep recession, we are still looking for a higher rate of GDP growth, stronger productivity growth, and increased work opportunities, especially for prime-age workers.

Low interest rates have historically been the prescribed treatment for a weak economy. However, the past seven years have clearly taught us that low interest rates alone cannot cure an ailing economy.

In response to this continuing challenge of stimulating growth to a more desired level, there seems to be a growing consensus forming that tax and regulatory reforms, plus fiscal stimulus measures such as targeted infrastructure initiatives, may be necessary ingredients, or perhaps are necessary ingredients, to incentivize capital investment and GDP growth.

But as we pursue these policy changes, we also have to be mindful of the nearly $20 trillion national debt that looms ominously over the U.S. economy.

Where debt-to-GDP stood at 39.3 percent in 2008, it will total 76.6 percent by the end of this year, according to the CBO analysis, and will climb to 85.5 over the next 10 years.

We look forward to hearing the Chair's thoughts on this economic outlook, as well as the types of policies that Congress perhaps should be looking at considering during this time of change.

I now recognize Ranking Member Maloney for her opening statement.

[The prepared statement of Chairman Coats appears in the Submissions for the Record on page 30.]

OPENING STATEMENT OF HON. CAROLYN B. MALONEY, RANKING MEMBER, A U.S. REPRESENTATIVE FROM NEW YORK

Representative Maloney. Thank you. Thank you so much, Mr. Chairman, for your leadership.

This is likely the last hearing of the Joint Economic Committee in the 114th Congress, and I would like to sincerely thank Chairman Coats for his stewardship of the JEC, and for holding a number of very interesting hearings that have generated excellent discussion.

I would also like to thank my colleagues on both sides of the aisle, and to welcome Martin Heinrich as the Ranking Member on the Democratic side, and to express my appreciation to Ms. Klobuchar who is going to be, I understand, Ranking on Rules.

I am particularly pleased that we are ending on a very high note with Federal Reserve Chair Janet Yellen.

Chairman Yellen, I think it is fair to say that all my colleagues warmly welcome you to this hearing, and look forward to hearing your thoughts at this critical time.

I would like to begin by thanking you for your extraordinary and careful leadership of the Federal Reserve that has played a critical role in helping our country recover from the worst recession since the Great Depression.

Your steady hand has built on the work of your predecessor and has guided the economy forward, and we thank you.

Much has changed since you appeared before the Committee about a year ago. The economy has continued to strengthen. The labor market has continued to improve. Wage growth has been the strongest since the Recession. Household income has had the largest annual increase since Census began tracking this data. Inflation has edged up, though it remains below the Fed's 2 percent target.

These are among the tea leaves of the economy, and everyone here is eager to find out how you read them. Up until very recently, it was widely assumed that the Federal Open Market Committee would raise interest rates at its next meeting less than a month from today.

Some of your past statements have indicated that this is a possibility, or even a goal. But then came a thunderbolt on November 8th. Many critical things about our country changed literally overnight, and our world has been turned upside down.

The question everyone would like to know is how the Federal Reserve will steer through the days ahead. One particular challenge is that the President-elect has called for policies that may have countervailing effects.

History has shown us that the type of tax cuts Candidate Trump has proposed disproportionately benefit those who do not need them, and dramatically increases our national debt.

I am also curious to see how President-elect Trump's infrastructure plan will be reconciled with the Republican Congress' past opposition to fiscal stimulus.

There is a great deal of uncertainty about fiscal policy, and that leads to uncertainty for markets, businesses, and the economy overall. One constant that I hope we can count on is monetary policy that remains insulated from political attack, and attempts to meddle in any way with the Federal Reserve's independence.

The election could also have a direct effect on the Fed itself. The President-elect's comments on this subject have been somewhat contradictory. He thinks both that the low interest rates are good for the economy and that the Fed is being political in keeping them at these levels.

In Congress some have called for revolutionary changes for the Federal Reserve, change that would affect the very nature of the institution, changes that in my opinion would lead to disaster.

For those who would like to restrict the independence of the Federal Reserve, I think it is important to briefly review the immense benefit of an independent Federal Reserve.

We have only to look back a few years. When President Obama took office, he inherited what former Fed Chairman Ben Bernanke called, and I quote, "the worst financial crisis in global history, including the Great Depression." End quote.

The Federal Reserve quickly acted to lower rates to almost zero, and has held them there for about eight years. It instituted several rounds of quantitative easing to further stimulate the economy. This action by the independent Federal Reserve was critical to our recovery.

Economists Alan Blinder and Mark Zandi found that efforts by the Federal Reserve and the Obama Administration, with support from Democrats in Congress, dramatically reduced the severity and length of the Great Recession, and prevented a depression.

With control of the Legislative and Executive Branches, past Republican efforts to limit the Fed's independence may gain momentum. Last year, Republicans in the House passed legislation, the FORM Act, that would fundamentally hamper the Fed's ability to conduct monetary policy. It would limit the Fed's independence by forcing it to determine target interest rates using a mathematical formula, while ignoring a broad range of important economic indicators.

Chair Yellen, as you noted before, if the Fed had been forced to follow such a rule in recent years, and I quote, "millions of Americans would have suffered unnecessary spells of joblessness over this period." End quote.

Another proposal is to jettison the Fed's mandate to try to maximize employment, and instead focus solely on inflation. I'm not sure that people in Michigan and Pennsylvania and other states would respond well to that suggestion.

But if that is the conversation my colleagues want to have, then we will be ready to have it.

The past nine years have been an extraordinary period in U.S. economic history. We should continue to study and learn from it. We are not out of the woods by any stretch. When the next recession hits, as it surely will, what will the monetary response look like? Will the Fed have the tools to restore growth? Will it return to quantitative easing? What other effective policy tools will the Federal Reserve have at its disposal?

I want to make one final point. The Federal Reserve has been at the center of the U.S. and global economic recovery. Efforts to hamstring the Fed are misguided, just as efforts to politicize it are wrongheaded.

Chair Yellen, thank you for appearing before the Joint Economic Committee today. We look forward to your testimony.

Thank you.

[The prepared statement of Representative Maloney appears in the Submissions for the Record on page 30.]

Chairman Coats. It is now my privilege to introduce to you our Chair of the Board of Governors, Janet Yellen, who has long experience at the Federal Reserve, including four years as Vice Chair of the Board of Governors, and six years as president and chief executive officer of the Federal Reserve Bank of San Francisco.

She previously served as Chair of the Council of Economic Advisers under President Clinton, and as Chair of the Economic Policy Committee of the Organization for Economic Cooperation and Development.

Chair Yellen earned her Ph.D. in Economics from Yale University, and is also a Professor Emeritus at the University of California at Berkeley.

It is my pleasure, Chair, to introduce you as our witness today, and to thank you for your always accessible presence before this Committee. You have been someone who has been a delight to work with and to get your guidance in terms of the direction we think the Fed needs to take in order to assure our public that there's a steady hand at the helm.

So we thank you for coming this morning and look forward to your testimony, and then we will have questions from our Committee.

STATEMENT OF HON. JANET L. YELLEN, CHAIR, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, WASHINGTON, DC

Chair Yellen. Thank you for those kind comments. It is my pleasure to be here.

Chairman Coats, Ranking Member Maloney, and members of the Committee, I appreciate the opportunity to testify before you today. I will discuss the current economic outlook and monetary policy.

The U.S. economy has made further progress this year toward the Federal Reserve's dual-mandate objectives of maximum employment and price stability. Job gains averaged 180,000 per month from January through October, a somewhat slower pace than last year but still well above estimates of the pace necessary to absorb new entrants to the labor force.

The unemployment rate, which stood at 4.9 percent in October, has held relatively steady since the beginning of the year. The stability of the unemployment rate, combined with above-trend job growth, suggests that the U.S. economy has had a bit more "room to run" than anticipated earlier.

This favorable outcome has been reflected in the labor force participation rate, which has held steady this year despite an underlying downward trend stemming from the aging of the U.S. population.

While above-trend growth of the labor force and employment cannot continue indefinitely, there nonetheless appears to be scope for some further improvement in the labor market. The unemployment rate is still a little above the median of Federal Open Market Committee participants' estimates of its longer run level, and involuntary part-time employment remains elevated relative to historical norms.

Further employment gains may well help support labor force participation as well as wage gains; indeed, there are some signs that the pace of wage growth has stepped up recently.

While the improvements in the labor market over the past year have been widespread across racial and ethnic groups, it is troubling that unemployment rates for African Americans and Hispanics remain higher than for the Nation overall, and that the annual income of the median African American household is still well below the median income of other U.S. households.

Meanwhile, U.S. economic growth appears to have picked up from its subdued pace earlier this year. After rising at an annual rate of just 1 percent in the first half of this year, inflation-adjusted gross domestic product is estimated to have increased nearly 3 percent in the third quarter. In part, the pickup reflected some rebuilding of inventories and a surge in soybean exports.

In addition, consumer spending has continued to post moderate gains, supported by solid growth in real disposable income, upbeat consumer confidence, low borrowing rates, and the ongoing effects of earlier increases in household wealth.

By contrast, business investment has remained relatively soft, in part because of the drag on outlays for drilling and mining structures that resulted from earlier declines in oil prices. Manufacturing output continues to be restrained by the weakness in economic growth abroad and by the appreciation in the U.S. dollar over the past two years.

And while new housing construction has been subdued in recent quarters despite rising prices, the underlying fundamentals—including a lean stock of homes for sale, an improving labor market, and the low level of mortgage rates—are favorable for a pickup.

Turning to inflation, overall consumer prices, as measured by the price index for personal consumption expenditures, increased 1¼ percent over the 12 months ending in September, a somewhat higher pace than earlier this year but still below the FOMC's 2 percent objective.

Much of this shortfall continues to reflect earlier declines in energy prices and in prices of non-energy imports. Core inflation, which excludes the more volatile energy and food prices and tends to be a better indicator of future overall inflation, has been running closer to 1¾ percent.

With regard to the outlook, I expect economic growth to continue at a moderate pace sufficient to generate some further strengthening in labor market conditions and a return of inflation to the Committee's 2 percent objective over the next couple of years.

This judgment reflects my view that monetary policy remains moderately accommodative and that ongoing job gains, along with low oil prices, should continue to support household purchasing power and therefore consumer spending.

In addition, global economic growth should firm, supported by accommodative monetary policies abroad. As the labor market strengthens further and the transitory influences holding down inflation fade, I expect inflation to rise to 2 percent.

I will turn now to the implications of recent economic developments and the economic outlook for monetary policy. The stance of monetary policy has supported improvement in the labor market this year, along with a return to inflation toward the FOMC's 2 percent objective.

In September, the Committee decided to maintain the target range for the federal funds rate at ¼ to ½ percent and stated that, while the case for an increase in the target range had strengthened, it would, for the time being, wait for further evidence of continued progress toward its objectives.

At our meeting earlier this month, the Committee judged that the case for an increase in the target range had continued to strengthen and that such an increase could well become appropriate relatively soon if incoming data provide some further evidence of continued progress toward the Committee's objectives.

This judgment recognized that progress in the labor market has continued and that economic activity has picked up from the modest pace seen in the first half of this year. And inflation, while still below the Committee's 2 percent objective, has increased somewhat since earlier this year. Furthermore, the Committee judged that near-term risks to the outlook were roughly balanced.

Waiting for further evidence does not reflect a lack of confidence in the economy. Rather, with the unemployment rate remaining steady this year despite above-trend job gains, and with inflation continuing to run below its target, the Committee judged that there was somewhat more room for the labor market to improve on a sustainable basis than the Committee had anticipated at the beginning of the year.

Nonetheless, the Committee must remain forward looking in setting monetary policy. Were the FOMC to delay increases in the federal funds rate for too long, it could end up having to tighten policy relatively abruptly to keep the economy from significantly overshooting both the Committee's longer run policy goals. Moreover, holding the federal funds rate at its current level for too long could also encourage excessive risk-taking and ultimately undermine financial stability.

The FOMC continues to expect that the evolution of the economy will warrant only gradual increases in the federal funds rate over time to achieve and maintain maximum employment and price stability.

This assessment is based on the view that the neutral federal funds rate—meaning the rate that is neither expansionary nor contractionary and keeps the economy operating on an even keel—appears to be currently quite low by historical standards.

Consistent with this view, growth in aggregate spending has been moderate in recent years despite support from the low level of the federal funds rate and the Federal Reserve's large holdings of longer-term securities.

With the federal funds rate currently only somewhat below estimates of the neutral rate, the stance of monetary policy is likely moderately accommodative, which is appropriate to foster further progress toward the FOMC's objectives. But because monetary policy is only moderately accommodative, the risk of falling behind the curve in the near future appears limited, and gradual increases in the federal funds rate will likely be sufficient to get to a neutral policy stance over the next few years.

Of course the economic outlook is inherently uncertain and, as always, the appropriate path for the federal funds rate will change in response to changes to the outlook and associated risks.

Thank you. I would be pleased to answer your question.

[The prepared statement of Chair Yellen appears in the Submissions for the Record on page 31.]

Chairman Coats. Chair Yellen, thank you for your opening statement. Something that caught my attention during that statement that I had not, in reading your statement earlier had not caught my attention, you stated that the case for an increase in the prime rate relatively soon, unless—it was the word "unless" that perked me up a bit—further evidence indicated to the contrary.

My question to you is: Are the results of the election, does it fall in the category of "unless"? And how is the FOMC looking at that in terms of the decision that the case for an increase is still relatively soon?

Chair Yellen. Well my own judgment is, looking at incoming economic data and developments thus far affecting the outlook, that the evidence we've seen since we met in November is consistent with our expectation of strengthening growth and improving labor market, inflation moving up. So we indicated that the case had strengthened for an increase in the federal funds rate, and to my mind the evidence we've seen since that time remains consistent with the judgment the Committee reached in November.

Now obviously there are many economic policies that Congress and the Administration will be considering in the months and years to come, and when there is greater clarity about the economic policies that might be put into effect the Committee will have to factor those assessments of their impacts on employment and inflation and perhaps adjust our outlook depending on what happens.

So many factors over time affect the economic outlook and the appropriate stance of policy that's needed to achieve our dual mandate of employment and inflation objectives. But at this stage, I do think that the economy is making very good progress toward our goals, and that the judgment the Committee reached in November still pertains.

Chairman Coats. Thank you. You suggested publicly that fiscal policy should play a role in stimulating economic growth. As I mentioned in my opening statement, any new economic growth initiatives envisioned by the next Congress and the next Administration should include a full accounting of its potential effects on the economy.

And from your perspective, how would you balance the need to promote economic growth with the realities associated with deficit spending and high and rising debt? I assume we are looking at some type of a balance there. How can that be achieved?

Chair Yellen. Well it's clearly up to Congress and the Administration to weigh the costs and benefits of fiscal policies that you will be considering.

My advice would be that several principles should be taken into account as you make these judgments. First of all, the economy is operating relatively close to full employment at this point, so in contrast to where the economy was after the financial crisis when a large demand boost was needed to lower unemployment, we are no longer in that state.

You mentioned the longer term fiscal outlook. The CBO's assessment, as you know, is that there are longer term fiscal challenges, that the debt-to-GDP ratio at this point looks likely to rise as the Baby Boomers retire and population aging occurs. And that longer run deficit problem needs to be kept in mind.

In addition, with the debt-to-GDP ratio at around 77 percent, there is not a lot of fiscal space should a shock to the economy occur, an adverse shock that did require fiscal stimulus.

I think what has been very disappointing about the economy's performance since the financial crisis, or maybe going back before that, is that the pace of productivity growth has been exceptionally slow.

The last five years, a half percent per year. The last decade, one-and-a-quarter percent per year. The previous two decades before that were about a percentage point higher. And that is what ultimately determines the pace of improvement in living standards.

So my advice would be, as you consider fiscal policies, to keep in mind and look carefully at the impact those policies are likely to have on the economy's productive capacity, on productivity growth, and to the maximum extent possible choose policies that would improve that long-run growth in productivity outlook.

Chairman Coats. Thank you. My time has expired, so I will turn to Congresswoman Maloney for her questions.

Representative Maloney. Thank you, Mr. Chairman. Thank you for your service. We will miss you. Thank you.

Can you envision any circumstances where you would not serve out your term as Chair of the Federal Reserve?

Chair Yellen. No, I cannot. I was confirmed by the Senate to a four-year term which ends at the end of January of 2018, and it is fully my intention to serve out that term.

Representative Maloney. Thank you. The election outcome introduced new uncertainties that the markets and the private sector had not expected and priced in. And how do you—how do these uncertainties affect the Fed's decision in the next meeting?

Chair Yellen. Well the markets tried to anticipate what policies Congress and the Administration will put into effect, and we have seen some significant market moves since the election. In particular, longer term Treasury yields are up about 40 basis points, and the dollar has strengthened about 3½ percent of broad index.

My interpretation would be that markets are anticipating that you will ultimately choose a fiscal package that involves a net expansionary stance of policy, and that in a context of an economy that's operating reasonably close to maximum employment, with inflation hitting back toward 2 percent, that such a package could have inflationary consequences that the Fed would have to take into account in devising policy; and that the market response is consistent with that view.

So, from our point of view we don't know what's going to happen. There's a great deal of uncertainty. Right now I've tried to offer you my assessment of where the economy is, and what policy response is appropriate in the months ahead.

Given my current assessment, we will be watching the decisions that Congress makes, and updating our economic outlook as the policy landscape becomes clearer, and taking into account those shifts in the economic outlook for the appropriate stance of policy. But I think that is how I would interpret the market response, but things could turn out very differently, we understand, and we will simply watch what decisions are made and factor them into our thinking going forward.

Representative Maloney. Does the lack of information warrant a delay in raising the interest rate say until the January meeting when you'll have more information?

Chair Yellen. Well my guess is that uncertainty about these matters will last for some considerable time. And we have had an accommodative monetary policy, I do think, and, the Committee has said for a long time that gradual increases in the federal funds rate are likely to be appropriate to promote our objectives.

And my assessment of where the economy is and how it has been operating and the fact that near-term risks do seem reasonably balanced, I would think that the judgment that the Committee reached in November remains the appropriate one.

Representative Maloney. And, Chair Yellen, one of the most significant responses to the financial crisis was passage of the Dodd-Frank law. Today, as a result of this law, the financial system is stronger, safer, and more stable.

How do you feel about repealing Dodd-Frank?

Chair Yellen. Well I agree with your assessment. We lived through a devastating financial crisis. And a high priority I think for all Americans should be that we want to see put in place safeguards through supervision and regulation that result in a safer and sounder financial system.

And I think we have been doing that, and our financial system as a consequence is safer and sounder. And many of the appropriate reforms are embodied in Dodd-Frank.

We now have much higher capital than before the crisis, much more stringent liquidity requirements. Derivatives, standardized derivatives are now subject to central clearing, and derivatives both cleared and uncleared are subject to margin requirements that increase their safety.

We have a new orderly liquidation authority. We're focusing on resolution through, and ending too-big-to-fail through the Living Wills process, which I think is really changing the mindset of large financial firms about how they need to run their businesses, and making them safer and sounder.

And Dodd-Frank placed considerable emphasis on financial stability. We now have a group, the FSOC, that meets, all the regulators, to consider threats to financial stability.

So I think Dodd-Frank was very important in fostering those changes, and we should feel glad that our financial system is now operating on a safer and sounder footing.

Representative Maloney. Thank you, and my time has expired, but I just have to ask you very quickly, do you have concerns that the repeal would make another financial crisis more likely?

Chair Yellen. I certainly would not want to see the clock turned back on all the improvements we have put in place because I do think they are important in diminishing the odds of another financial crisis.

Representative Maloney. Thank you for your service.

Chair Yellen. Thank you.

Chairman Coats. Thank you, Congresswoman. Our Vice Chairman, Mr. Tiberi.

Vice Chairman Tiberi. Thank you, Chairman. I am bookended by two individuals who are going to retire at the end of this session, and it has been an honor and a privilege to serve on this Committee with both of you. Mr. Hanna has brought so much business expertise, and Chairman, if there were a picture in the dictionary of Indiana Nice, you would be that picture. It has been an honor and a privilege to serve with you. You will be missed. I am comforted only by knowing that your replacement, my colleague Representative Todd Young, is as nice and as smart as you. So, a great successor.

Chairman Coats. He's actually smarter.

[Laughter.]

Thank you for the compliment.

Vice Chairman Tiberi. Thank you. It's been an honor to serve with you here.

Chair Yellen, it is an honor to have you here. Thanks for your time. In a story this month in The Wall Street Journal, they reported that for the first time in more than 30 years banks, credit unions, and other depository institution's share of the mortgage market fell below 50 percent because of banks' aversion to risk and fear of legal and regulatory issues.

And while some lending has increased, banks have shifted clearly to jumbo mortgages and borrowers who have the best credit. Loans to small businesses have lagged, and new rules for credit cards may be hindering lending, as well.

President-elect Trump has said that Dodd-Frank is, and I quote, "a tremendous burden to the banks." He's expressed the same concerns that banks are unable to lend to people who actually need it, and people who want to start a new business or expand a current business, which has made us less competitive and has slowed growth.

His view is shared by many community bankers, by small and medium-sized business owners, and by many economists across our country.

Further, the GAO just released a study of the Federal Reserve Bank's stress test procedures and had 15, as you know, recommendations for making improvements that go beyond what Governor Tarullo recently outlined as next steps.

Chair, what are your responses with respect to the following issues:

The current state of bank lending?

The constraining effects of regulation generally, and stress test in particular?

And finally, the impact on the economy's ability to grow and create jobs?

And one last thing, do you plan on adopting the GAO stress test recommendations on improving transparency, model design, and management, and cost/benefit analysis? And any of that I asked, if you can't respond to today, I certainly understand, if you could reply in writing I would certainly appreciate it.

Chair Yellen. Let me take a shot at it, and if there is something I do not cover I would be glad to respond.

Let me just start by saying something about the burdens on community banks. Community banks play a very important role in our economy in lending, understanding the conditions in their communities, and providing lending that supports economic growth. And it is really critical that they be able to function and to thrive.

We recognize—we talk to community bankers regularly and recognize that the burdens that they are operating under are significant, and want to do everything that we can to reduce those burdens and to simplify the compliance regime for those banks.

We have taken many steps on our own to reduce the burdens of our supervision, and we are contemplating ourselves, the regulators, working on possible proposals for a simplified capital regime that would apply to smaller community banks.

So I completely agree those banks play a critical role and we need to focus on reducing burden.

Now to the Dodd-Frank rules, many of them apply particularly to the largest financial institutions. And the most significant increases in capital requirements, including surcharges for the largest capital surcharges for the largest firms that create the greatest systemic risk, the burdens of stress tests and other regulatory requirements fall on those firms that I do think pose potential threats to financial stability. And it is important that those institutions maintain higher standards of safety and soundness.

You mentioned the stress tests and GAO's finding. Stress tests have been central to the Federal Reserve's efforts to increase capital and ensure the capital planning in large systemic financial institutions. The capital planning takes into account an accurate assessment of the risks that could strike banks.

And the GAO in their review found generally that our CCAR and DFAST stress tests are effective, are useful. They suggested some changes, many of which we had already considered or had underway, and their suggestions are useful and we intend to take them up, or look carefully at it. So it was a very useful report.

But bottom line, it concluded that our stress testing regime has resulted in a very substantial improvement to safety and soundness.

I should say that we recently put out in the regulation that will reduce the burden of the stress testing regime on institutions between $10 billion and $250 billion in size—I guess $50 billion and $250 billion, that those institutions will no longer be subject to the qualitative part of our so-called CCAR capital review process, that we will no longer object to capital distributions based on qualitative evaluation of their capital planning process; that we will look at their capital planning process through normal supervisory methods. And I think that that will serve to reduce burden on a number of large, but smaller institutions subject to the stress test.

And finally you asked me about bank lending and mortgages. I think certainly mortgage credit standards have tightened up, and there are borrowers who are finding it difficult with lower credit ratings to obtain mortgage credit.

I think it is a consequence of the financial crisis regulations and greater caution on the part of lenders. I think we wouldn't want to go back to the mortgage lending standards that we had in the first decade of this century that led to the financial crisis, but they certainly have increased.

On small business lending, I think my assessment there would be that it remains largely available, and that banks find—and this is something you also see in surveys—that the demand for lending for borrowing by small businesses has not been very robust in recent years. In part, I think they see their sales are not growing sufficiently rapidly to justify much borrowing.

Certainly the community banks and other banks that we talk to and monitor suggest that they stand ready and have adequate resources to support additional lending to smaller businesses, but there is a question there as to whether that is a demand or supply issue.

Chairman Coats. Thank you, Congressman. I have just been alerted that the House has been called for a vote, which may scramble, but we would love for you to vote and come back and we will keep your place in line.

And my Senators, as I look down the line, are smiling because that means they move up on the list.

[Laughter.]

Senator Klobuchar, you are next on the list.

Vote and come back, and we'd love to have you back, and we will keep you on the list.

Senator Klobuchar. Okay, thank you. Thank you very much, Madam Chair.

Just to follow up on Representative Tiberi's questions about community banks, I appreciated that. Madam Chair and I have discussed that many times, and I think I will just put some additional questions on the record.

As you know, I am concerned about the status of community banks and what has been happening the last few years.

I wanted to start out with a question about the importance of independence for the Central Bank. I know you can't comment on political goings on, but you may have noticed there was some campaigning going on in the last year, and the Federal Reserve was discussed a few times.

Could you comment on the importance of preserving the independence of the Federal Reserve Bank from interference by either the Executive Branch or the Legislative Branch and what that would mean for monetary policy effectiveness if there wasn't a sense of independence of the bank?

Chair Yellen. Thank you for that question. I think independence by a central bank to make tactical decisions about implementation of monetary policy, subject to a Congressional mandate which we have—obviously we are accountable to Congress. We are a creature of Congress. Congress established goals for us of maximum employment and price stability.

But it is critically important that a central bank have the ability to make judgments about how best to pursue those goals while being accountable for explaining its decisions and transparent in its decision making.

Central banks around the world in recent decades have gained this independence, and the economic outcomes that have resulted from this trend towards central bank independence we have seen much better macro economic performance.

Senator Klobuchar. Are there actually studies showing that banks that have independence, that there have been improvements in those countries?

Chair Yellen. Yes. There is clear evidence of better outcomes in countries where central banks can take the long view, are not subject to short-term political pressures, and sometimes central banks need to do things that are not immediately popular for the health of the economy.

And we have really seen terrible economic outcomes in countries where central banks have been subject to political pressure. Often it's the case when a country is not able to balance its budget and is running large deficits and is finding it hard to finance those deficits—how can you finance it? You realize you can go to the central bank and force it to buy the debt that is being issued. And the story in every country that has experienced very high, or even hyper inflation, is one where a central bank has been forced to follow the dictates of the government that has compromised its independence.

So markets come to expect low and stable inflation from a central bank that has political independence and good economic performance. And I believe we have seen that both in the United States and globally.

Senator Klobuchar. Thank you.

You know, the Fed has the dual goal of maximum employment and price stability. There has been some talk out there of eliminating one of the goals and focusing on price stability. And there's also been comments to have the Fed target a certain growth rate for the economy.

What do you think would be the effect of that, to either limit the Fed's focus to stabilizing prices, get rid of the other part of the dual mandate, or targeting a certain growth rate?

Chair Yellen. So I am a strong believer in the Fed's dual mandate. It was Congress' decision, and of course it is up to Congress what our mandate should be. But I believe that both of these—both price stability, the rate of inflation, having that low and stable, and employment matter greatly to the American people.

They both impact the welfare of households and individuals in this economy to a great extent, and I think they are both appropriate goals.

Price stability is a goal of every central bank. Most central banks also take employment, or real side performance into account in achieving it.

Now I would say really there is rarely any conflict between pursuing these two objectives. So it is not commonly the case that—they could be in conflict, but most of the time they are not. And if you think about what we have faced, the Federal Reserve, in the aftermath of the crisis, we have had very high unemployment that we wanted to bring down as rapidly as possible. And inflation that has been almost consistently below our 2 percent objective. And so our efforts to put in place a highly accommodative policy were directed toward achieving both of those goals, and they have not been in conflict.

With respect to a growth rate objective, we can't independently, if we are to achieve our inflation objective, simply choose some arbitrarily chosen growth rate objective and try to achieve it. If we tried to do that, and it's one that's not consistent with the underlying productive potential of the economy, and the economy's ability to grow based on changes in technology and capital and labor overtime, we would end up with an economy that either has inflation that's above acceptable levels, or conceivably deflation if the target were chosen too low.

Senator Klobuchar. Thank you very much. I will submit my questions on infrastructure funding and its effect on the economy, something the President-elect has discussed for the record. And the positives of doing that. And questions on income inequality and some of your views on that.

Thank you very much.

Chair Yellen. Thank you, Senator.

Senator Klobuchar. Thank you.

Chairman Coats. Senator, thank you. I know the members of the Committee will miss your presence in the future as you are moving on to greater responsibilities.

Senator Klobuchar. Well I may still be on the Committee, but, yes. Thank you.

Chairman Coats. Congressman Hanna.

Representative Hanna. Thank you.

We talked about Dodd-Frank. Prior to Dodd-Frank, the Federal Reserve examiners took responsibility for the safety and soundness of money as well as consumer protection oversight.

Dodd-Frank moved that over to the CFPD. And yet, in 2015 the LA Times reported that Wells Fargo with cross-selling pressures on consumers, consumer bankers, was encouraged, and encouraging fraud. Wells Fargo paid $185 million in fines.

And I know this is somewhat hypothetical, but I am curious. So Dodd-Frank in this instance, with whoever is doing this, missed this. And it is a profound miss. Do you think it would have been any different had it been left with the Federal Reserve?

Chair Yellen. Well we have cooperated historically with other regulatory agencies to engage in examinations. And in this case, the Consumer Financial Protection Bureau was involved, the Comptroller of the Currency. Most of the abuses that occurred were in the national bank where the Comptroller of the Currency also has responsibilities. That's been historically true.

So, you know, they did find these problems. They have levied significant fines and put in place enforcement actions to correct them.

We in 2011 looked at a subsidiary we were then responsible for, which was the independent mortgage company, and found abuses which we fined Wells Fargo for and put in place enforcement actions.

I think we have all worked together pretty constructively to try to address abuses. I mean, I would say that we, going forward in the institutions that we supervise, state member banks, are looking to see if there are similar practices that could cause problems. And with the holding companies we supervise with the largest institutions, we have undertaken a thorough horizontal review of compliance practices.

But we do work constructively and collaboratively with the other agencies.

Representative Hanna. So there is no real disconnect because of the Dodd-Frank?

Chair Yellen. There are many agencies in the United States involved in supervision, and we do try to work constructively together. And I think we have had a good working relationship with those other agencies. So I wouldn't want to levy a criticism there.

Representative Hanna. Sure. I understand. In previous hearings we've discussed student debt, the massive amount of student debt, and how that impacts starting a family, having a home, doing all those things that people used to do at a much younger age. How do you take that into account? How does the Fed take that into account when they consider all the things that they look at?

I mean, it is somewhat like consumer debt out there, this trillion dollar number that is haunting and hanging over everyone's head, but how does the Fed think about it going forward?

Chair Yellen. So we have been very attentive to trends in student debt. And as you say, it really has escalated to an extraordinary degree. There is a good deal of research that is trying to determine whether or not student debt burdens might be impeding household formation.

Household formation has been very low. The number of young people who are purchasing new single-family homes has been quite depressed. And we have seen less of a recovery in the housing sector, and pickup in housing starts than we would have expected. Multi-family has been quite strong, but single-family construction has been depressed.

There are a number of factors I think that are contributing to that. And there is some research that suggests student debt is a factor that is leading to the decision to reduce willingness of Millenials to buy single-family homes. They are marrying later, getting more education, living more in cities, have more student debt. It is difficult to sort out exactly what the most important drivers are, but that could be one of them.

Representative Hanna. Thank you. Thank you. It is interesting how we study things. Bob Dylan said—I think it was him—said "You don't need a weatherman to know which way the wind blows," and we spend a lot of time figuring out things that are kind of patently obvious.

But thank you for your time today.

Chair Yellen. Thank you.

Chairman Coats. Thank you, Congressman.

Senator Peters.

Senator Peters. Well thank you, Chairman Coats. And before I begin my questioning, I just want to thank you. It has been a real pleasure and an honor to be on this committee with you, and wish you well in your future endeavors.

Chair Yellen, it is wonderful to be with you here today, and thank you for taking the time. And I certainly know that you understand that politics shapes America and democracy in sometimes very unpredictable ways, and we have to be prepared for that unpredictability.

And in times of uncertainty and change, one thing that always seems clear but always stands out is that Americans care about the economy, usually first and foremost. And they are concerned about their pocketbooks, their futures, they want good jobs, they want growth, a better chance for their children. And while politics that shape our democracy do not always follow any kind of predictable pattern, all of us need some measure of stability and certainty—be it markets, consumers, savers, spenders, retirees, young professionals, the list goes on.

Thankfully, to paraphrase President Obama, the Federal Government remains an ocean liner, not a speedboat. But there still remains, without question, a level of uncertainty about the near term of fiscal policies in this Nation. So I just wanted to say how much I appreciated your comments on the independence of the Fed, and the necessity for that. Monetary policy has been, and I certainly think must continue, to be a balance and a complement to fiscal policies of the Federal Government.

And I also think that unfounded accusations that the Federal Reserve monetary policies are somehow political in nature can be one of the most damaging claims that can happen in a modern democracy.

Certainly as policymakers I believe we have a role to express our views on individual monetary decisions, whether in criticism or in praise, but to undermine the independence and the credibility of the Federal Reserve is a very dangerous action that may be very difficult to undo once it is out there.

And I do not believe these are just abstract discussions. The potential for undermining the credibility of a central bank will have a direct impact on the economy, and ultimately on our constituents back home.

And I believe that Members of Congress have the added responsibility as elected officials to uphold these important norms that have guided our country for decades.

With that, I would urge my fellow policymakers here in both the Legislative and Executive Branches to exercise caution and prudence when it comes to these types of criticisms.

But turning to a question, Chairman Yellen, I believe that perhaps one of the greatest challenges that we face in our banking system today is cyber security. And from a consumer level to a commercial level, to a level of global banking system, we face tremendous threats every single day, as I know you are well aware.

The warning signs are very evident. One example was in February 2016 hackers successfully stole $81 million from Bangladesh Central Bank by sending false payment requests to the New York Federal Reserve.

Since this hack was first reported, additional breeches have been uncovered, including attacks in Vietnam, Equador, and more. These hacks have all been through the SWIFTS, the Society for Worldwide Interbank Financial Telecommunications Banking Network, used worldwide by more than 11,000 financial institutions. And I use this example not to speak ill of SWIFT, who has pledged to take steps to strengthen the security and that of their partners, but rather to just illustrate on a global level that we are only as strong as our weakest link when it comes to cyber security.

In August of this year, I wrote President Obama to put the topic of international cyber security on the G–20 agenda, and in the months following I am pleased that the Group of Seven introduced eight suggested principles for private firms and government agencies to follow. And I continue to believe this is an issue that we must do in a collaborative and international manner.

So my question to you, Chair Yellen, is: What steps has the Federal Reserve taken to ensure both internal cyber security, as well as cyber security of financial institutions overseas? You currently play a central role and will continue to play a central role. What assurances can you give us, please?

Chair Yellen. So let me start by saying that I agree very much with your assessment. This is one of the most significant risks our country faces, and we are cooperating with the regulators, as you indicated, internationally, working with the G–7, cooperating with the financial institutions to make sure that we have a system that is prepared to deal with cyber security risks.

We are very focused on this in our own operations, and I can provide you more details if you're interested in the various things that we are doing to make sure that our own systems are safe and meet the highest standards.

We are also working closely with financial institutions to make sure that the controls that they have in place are appropriate. It is a key part of our supervision. We recently put out an advanced notice of proposed rulemaking that suggests higher standards of cyber security protections for institutions that are systemically important.

And for those that are really interconnected where a problem could spill over to the entire financial system, we are proposing the very highest standards that those firms should meet, given the fact that they could be a source of vulnerability to the larger financial system.

But I would say that, while we are focused on this in our own supervision and we are working closely with other financial regulators. The U.S. Treasury has taken the lead here. This is something the Congress needs to look at very carefully.

It is not just a matter of the Fed and financial institutions. Risks involve merchants and others involved in the economy. And it is a very broad threat that we alone are not able to deal with adequately. I hope you will stay involved.

Senator Peters. Well I will, and I look forward to taking you up on your offer to sit down and have a more detailed discussion as to what is happening at the Federal Reserve. I serve on Commerce, as well as Homeland Security Committees. All of this merges together in addition to what we are doing here. And again, this is, as you stated yourself, the most significant threat that we face now in cyber security.

So I look forward to working closely with you. Thank you for your testimony today.

Chair Yellen. Thank you.

Chairman Coats. Okay. Well, I've got Members coming back and forth. We have this Byzantine process of going back and forward here. I think you are between votes? Is that what you said? We are going to give you your five minutes, and then Senator Lee will be next.

Representative Grothman. Thank you. One of the controversial things with the Federal Reserve—and I want to ask you about this—is last time we were in a crisis, you bought a lot of mortgage-backed securities. Correct?

Chair Yellen. We did.

Representative Grothman. And do you feel you paid above-market value for those securities? Or did you pay above-market value for those securities?

Chair Yellen. No. We always purchase securities in the open market at market prices.

Representative Grothman. Okay, could you give me a description of other private bonds that you have purchased over the last few years?

Chair Yellen. We have not purchased private bonds. We are only allowed to purchase Treasury and Agency securities.

Representative Grothman. Okay, how would you describe mortgage-backed securities?

Chair Yellen. Those are Agency securities. They are issued by Fannie and Freddie——

Representative Grothman. Okay, so you consider that the equivalent of a government bond?

Chair Yellen. Well it is an Agency bond, and those are permissible investments for us. We buy securities in the open market in a bidding process, an auction process that we purchase at market prices.

Representative Grothman. And do those market-backed securities, do they have a face value, so to speak, or they—I guess I'll describe it that way. They have a face value? In other words, their value where their value is if say all the mortgages would be paid in full?

Chair Yellen. They do have a face value. And then of course they trade in the market, and prices can deviate from those face values.

Representative Grothman. And when you were purchasing them, what were you paying compared to the face value?

Chair Yellen. I honestly don't have—I don't have—we've published that information. I don't have that information at my fingertips.

Representative Grothman. Do you have just a wild guess? I know maybe it is an unfair question. Ninety percent? Eighty percent? Seventy percent? Just wildly?

Chair Yellen. We would have been paying market prices for securities at that time.

Representative Grothman. Yeah, I know, but you don't know about—was that 70 percent of face? 80? I'm not going to, you know, I realize you don't know exactly, but you must know about?

Chair Yellen. I don't think the discounts were nearly that deep, but I may be wrong.

Representative Grothman. Okay. Okay, that's my final question.

Chairman Coats. Congressman, thank you.

Senator Lee.

Senator Lee. Thank you very much, Mr. Chairman, and thank you, Chair Yellen, for being with us today.

In 2013 there were 12 banks, as I understand it, that controlled 69 percent of the industry assets. And I think we have been seeing a market increase in the share of revenues concentrated in a relatively small handful of firms. I see you are nodding. I assume that means you would not disagree with that?

Chair Yellen. I believe that is true.

Senator Lee. Then there was the economic census of 2012, and we learned from that study that there were some 33,000 fewer business establishments in the finance and insurance industry than there were in 2007.

So over that five-year period we saw 33,000 business entities that left the market or were consolidated into something else. I think it is worth evaluating the potential problems that an increasingly concentrated and potentially less competitive banking sector might pose, especially in light of some of the concerns surrounding the too-big-to-fail concern.

So let me ask you this, Chair Yellen. What risks do you see that might come from the concentration of power, the concentration of market share within the financial industry? What risk do you think that might pose to our overall financial stability?

Chair Yellen. So large interconnected, complex firms. It's not just a question of size, but size is part of it, but other characteristics matter, too. Their distress or failure could pose significant risks to financial stability.

And a great deal of our regulatory and supervisory response since the financial crisis has been directed at those firms that do pose such systemic risks. And we have imposed much higher capital standards, and capital standards for individual firms that reflect our assessment of the individual risks that each of those systemic firms poses to our financial system.

Because of the risks they pose, they need to have a lower probability of distress to be better managed, have more liquidity, to have resolution plans; that we need to make sure these entities are resolvable, and diminish their risk of failing. And through our stress tests and capital requirements, resolution plans, living wills, and other things, we have improved the safety and soundness especially of those institutions.

Senator Lee. Let's talk about those efforts for a minute. You mentioned stress tests in particular. Since the enactment of Dodd-Frank, and over the last few years, the Fed has undertaken various measures, some of which you referred to, of regulatory enforcement.

I wonder whether some of those efforts might undermine the due process interests of those who own the banks—not just the banks themselves, not just the wealthy people who are invested in them, but also the many people, including retirees, who invest in them.

A long-standing concern of due process involves certainty in the law. James Madison described this in Federalist 62 when he said that the people—it will be of little avail to the people that the laws may be written by individuals of their own choosing if those laws be so voluminous, complex, and ever changing that they cannot be understood. Or if they undergo such incessant changes that no person who knows what the law is today can be sure what it will be tomorrow.

My understanding of the stress test is that the standards are constantly changing. And there is kind of a black box. And so they do not know what the law is today, and they know even less about what the law will be tomorrow—if by "the law" we mean the standards, enforceable by the Fed, that carry the force of law will be.

How is that consistent with due process? And how can the lack of transparency be consistent with our time-honored standards of due process?

Chair Yellen. So I would disagree that there is a lack of transparency. While we do not publish the precise mathematical formulas that are used to evaluate bank portfolios, we have published and shared with the industry a great deal of information about the models that we use.

We have——

Senator Lee. A great deal of information "about" them. But that does not mean that they know what the models are. And the models themselves are the basis for legal standards to which they are subject, are they not?

Chair Yellen. We want these banking organizations to have sound risk management. And that means developing their own capacity to evaluate the risks in their portfolios, rather than using a model that we hand them.

And the GAO review of our stress testing looked at this very carefully and they did not recommend that we share with the industry the exact details of the model.

We have put out for public comment policies about how we design stress test scenarios. The industry understands how we go about devising those scenarios, although they change from time to time, and they have a great deal of information about the models that we use and what is contained in them. But we want to make sure that they have appropriate incentives to analyze their own unique risks of those organizations that may not be captured in our stress test, and that they build models that are appropriate for each individual firm.

Senator Lee. My time has expired. I have to respect the clock and the Chairman and my fellow committee members. I do want to point out, the GAO did in fact recommend updating and revising the guidance. And I also want to be clear that I understand you have got a difficult job to do, and I understand these are very important things, but I do not think we can overlook the fact that simply because something is important does not mean that we can subject the American people to laws that are constantly subject to change. Laws that are not even written by individuals of their own choosing. Laws written by people who are unelected and therefore unaccountable to the people.

It does not mean they have bad intentions. It just means that there can be no due process in that environment. And I think we have got to take that into account and we need to be very mindful of that and look for ways to reform it.

Thank you.

Chairman Coats. Thank you, Senator.

Senator Casey.

Senator Casey. Mr. Chairman, thank you very much. And I want to thank you, Senator Coats, for your service and the work you did in working with Representative Maloney and others on this Committee. So we are grateful for that, and wish you luck as you transition.

Chairman Coats. Thank you.

Senator Casey. Madam Chair, we are grateful to be with you again, and thank you for your testimony. When you provide this testimony, we always learn from it.

Chair Yellen. Thank you.

Senator Casey. And my copy of your remarks is highlighted in yellow, the parts that were most interesting to me, and I will quote from them in a moment.

But I want to focus on maybe one word, but unfortunately a vexing problem, and that is wages, or lack of wage growth. We have had I think a basic disconnect lately where, with a good recovery corporate profits are healthier, thank goodness, but the wage picture over time—not the most recent numbers, but over time—has been a different story.

So we do have a disconnect where folks see corporate profits going up, and Wall Street having good results, and their own wages not growing over time. And I think it is a problem for both parties to come together and tackle it.

I believe we need to focus on short-term strategies to deal with that, as well as a set of long-term priorities that I will just quickly mention. But we have seen not just in the context of the election but even prior to that, but maybe most especially, people leading lives of real struggle. And a lot of it is connected of course I think to the wages.

You are familiar with, and I think most people are, one of the studies at the Economic Policy Institute, which basically said wages grew more than 90 percent, maybe as high as 91 percent, for 25 years after World War II, along with an alignment of productivity growth. But then after that, roughly around 1973, even with productivity still increasing more than 70 percent, wages kind of flat-lined, by one estimate 11 percent over 40 years.

If that data and that analysis is in any way accurate, and I believe it is, we are looking at wage growth of 11 percent over 40 years. What we cannot endure is another 20 or 30 or 40 years of that kind of wage growth.

So what do we do about it? Well, one thing we need to do I think is to focus on ways to help communities when they are dramatically affected by substantial job loss in the short term. I am thinking of a place like Erie County, Pennsylvania, the City of Erie and the County of Erie. They have suffered a lot of job losses when GE moved jobs down to Texas.

One of the things I hope we can do, and something I have been advocating for, is having measures that will provide immediate and targeted assistance to communities that have that seismic impact that leads to a lot of job loss.

Over time, though, I think we need to focus on more strategic actions—quality affordable child care, a real commitment to early learning which we don't really have as a Nation. And then some of the things we have heard a lot about lately and I hope we can get agreement on in both parties, investments in infrastructure, not only the more traditional roads and bridges, but also broadband deployment. It is pretty hard to grow a business or run a family farm if you are in a smaller community that does not have access to broadband, especially in rural America where the problem is really alarming. There are huge percentages of rural America, rural Pennsylvania, that do not have broadband.

So that is a lot to chew into, but I want to get your sense of what you—not what you hope we would do, but maybe from the vantage point of what you think works, short-term strategies to raise wages, as well as long-term investments that might result in that. If you have any ideas about that, or opinions about that?

Chair Yellen. So you pointed to the fact in your comments that the behavior of wages, the disappointing growth in wages, is not just a recent phenomenon. It is not just something that is associated with the Great Recession following the financial crisis, although that took a huge toll. It is a longer term trend.

Many economists feel it reflects both technological change that has persistently favored skilled workers and diminished the job opportunities of those who do more routine or less-skilled work, and globalization I think also played a significant role.

And even though many economists believe that these forces are good for in some sense the economy as a whole, there are many individuals who were very badly and very negatively affected by these trends.

And I agree with your focus, that it is important to think about how to help individuals who are not winners because of trends of technology and globalization, and how to put in place inclusive policies that will help those individuals and make sure that the gains are broadly shared in our society.

I do not have a foolproof method to do this, but you gave a very good list of things that are certainly worth for the Congress and the Administration to consider.

Certainly when you see a rising gap between the wages of most skilled and less-skilled workers, and that has occurred since the mid-1980s, that is in a way a signal that is saying investing in people, investing in education, investing in workforce development training.

We see now there are high levels of job openings, and yet there is a certain degree of mismatch of skills with openings, investing to make sure that individuals have the skills they need to fill the jobs that are becoming available.

And there is a good deal of research on early childhood education. That is important. So there are a wealth of investment possibilities that could help to mitigate this trend and other interventions, and I definitely think it is appropriate for Congress and the Administration to consider a broad range here.

Senator Casey. Well I appreciate that. Let me just say, in conclusion, and I do appreciate the feedback on that, that the part of your testimony, one part that I did highlight, which is good news on wages. You say, in part, quote, “some signs that the pace of wage growth has stepped up recently,” unquote. That is reflected in the 2015 wage increase.

Chair Yellen. Yes. So we are seeing some evidence, and I think that is good. But over the longer run, we do have a trend here. And it is important to do more than that.

Senator Casey. Thank you very much.

Thank you, Mr. Chairman.

Chairman Coats. Thank you. Senator Heinrich, you are on. Let me just state that in the shuffling that goes on between various Congresses, it appears that you are going to move up significantly into this chair. And so I welcome you to that.

My understanding is the Chairmanship now reverts back to the House, and it could be Mr. Tiberi, but we are not sure about that, but we are looking forward to your leadership here. So I’d love to give you the chance here to talk to Chair Yellen who I would assume will be one of your key witnesses.

Senator Heinrich. And, Senator Coats, I just want to say how much of a pleasure it has been to work with you both on this Committee, and also on the Intelligence Committee.

Chair Yellen, I am just going to jump into some questions, because actually Senator Casey went really exactly where I want to go as well. The economy has come a long way in the last few years. It is certainly growing.

But I think historically we have had this approach of if we can just make the economy grow, then a rising tide lifts all boats. And I at home hear from people, and we certainly saw I think the same sentiment in the recent election, that some of those boats just have not been keeping up with the rest of us.

And that is a fundamental problem with the quality of our economy. So things like wage growth, and particularly the seemingly broken link between productivity in wage growth. Some of the lack of which growth you can ascribe to skilled versus unskilled.

But we have also seen this very divergent path where historically we are able to keep wages sort of tied to the same trajectory as productivity. And we have seen those split apart. Do you have thoughts for why that is? And how we can seek through vocational training, or other policies to relink those things together for a broad swath of America that is simply not feeling the benefits of a growing economy, or a rising stock market?

Chair Yellen. So productivity growth is important over the long haul to real wage growth. And it has been extremely disappointing over the last decade. But I also agree with the point that you just made, that we have had periods in which real wage growth has not kept up with productivity growth. That is also true.

One way of—data that shows that if you look at the share of the pie, and here by "pie" I mean our gross domestic product, our output bundle of the economy, it's division between rewards to labor and rewards to capital. That share was essentially constant for 100 years.

And more recently we have seen an increase in the share of the pie going to capital. And that is consistent with real wages not keeping up with productivity.

There is some research on that. The United States is not the only country that has seen that happen. I am not certain what the cause of it is, but I would agree with you that that is something that has happened.

I think we are seeing a little bit of reversal of it now that the labor market is very tight and wages are increasing more rapidly. But even if wages were increasing in line with productivity, we do have the fact that we are seeing rising income inequality. We have been seeing that for a long time. A loss of middle income jobs in the face of technological change and globalization. That was probably accelerated in the aftermath of the financial crisis.

So we have people who lost good jobs where they were earning good incomes. And even if they can find work, because after all the unemployment rate is low and there are a lot of job openings——

Senator Heinrich. But the nature of those jobs has really changed.

Chair Yellen. The nature of the jobs have changed, and the incomes, so they're taking large wage hits. And we are seeing the frustration that comes with that, and we just go back to the points I made in response to Senator Casey's comments. I believe there are lots of things that could be considered that is not in the domain of monetary policy, but they are structural policies of training, education, and safety net.

Senator Heinrich. Okay. Well you answered some questions earlier that were really focused on mortgages and the tightening mortgage requirements. I wanted to sort of cut quickly to the chase there and just ask you:

Fundamentally, do you think—I mean we all agree that things were not—we were not getting the balance right when the mortgage crisis occurred. And certainly we have seen stricter requirements, and in large part we have seen some benefits from that. But do you think we have gotten that right?

Have we gone too far in tightening mortgage requirements? Or have we gotten the balance right, coming out of the mortgage crisis of 2007?

Chair Yellen. So that is a hard question, and I do not think I can give you a simple answer to that. I think it is appropriate that standards are tighter, but I think there are some groups for a variety of reasons that may be having an unduly difficult time in the aftermath.

Senator Heinrich. Thank you, Chair.

Chairman Coats. Thank you. And, Senator Cassidy.

Senator Cassidy. And I also, Mr. Chair, thank you for your chairmanship this past Congress, and thank you for your service to our country in a variety of ways.

Chairman Coats. Thank you.

Senator Cassidy. As an Ambassador, as this, as many other things. So thank you.

Madam Chair, thank you for being here. Thank you for all you do.

Chair Yellen. Thank you.

Senator Cassidy. I am very aware that your knowledge on all of this greatly exceeds mine, so I ask with trepidation, but I ask with sincerity. I was privileged to have a conversation with one of your predecessors a few months ago, Alan Greenspan. I asked him, listen, this is the first time over eight years we've never had GDP growth over 3 percent. Is this the new norm?

He said, it might be; that long-term capital investment continues to decline.

Now I have a graph. I'm sorry, I wish I could blow it up but you think in numbers so it probably is clear to you. It looks like since 2011 the year-over-year growth in capital expenditures by Fortune 500 companies have declined pretty significantly.

[The chart titled "YOY Growth in Gross Share Buybacks, Dividends, and Capital Expenditures—TTM Basis" appears in the Submissions for the Record on page 44.]

And it occasionally levels, but then it begins to decline again. On the other hand, every time there's a QE, there is a spike in buybacks.

So there are those who say the easy money has made it easier for big corporations to arbitrage, as opposed to make money by long-term capital investment.

Going back to my conversation with former Chair Greenspan, he said that if you go to a board of directors and you say we need a 30-year spending plan for capital investments, they are going to say where's the certainty?

On the other hand, if you say we can invest in whatever we invest in in terms of the credit markets or the bond market, we can have a return, they will. So your comments has perversely the QE hurt long-term capital investment, that is what I am told is key to productivity growth and rising wages and a rising GDP.

Chair Yellen. So there are a number of factors that have been depressing GDP growth. A number of my colleagues now estimate that long-term growth rate is likely to settle under 2 percent without some change in policy.

We have a more slowly growing labor force. And educational attainment of the workforce which had been increasing at a more rapid rate is now leveling off. And so there is less contribution there.

I agree with you that capital investment has been weak, and that is one reason that productivity growth has been as depressed as it is. Even outside of investment, improvements in technology that come from other sources also seem to have diminished.

Now it is not clear to my mind why it is that investment spending has been as weak as it is. Initially we had an economy with a lot of excess capacity. Firms were clearly operating without enough sales to justify a need to invest in additional capacity. And more recently with the economy moving toward full employment, you would expect to see investment spending picked up and it is not obvious exactly why it has not picked up. But I would not agree that the Fed's monetary policy has actually hampered business investment, or been a negative factor. And I am not aware of any evidence that suggests that it is.

Senator Cassidy. If I could, because I am almost out of time and Mr. Chair's going to wrap up and then I am through, I have a graph that shows that in about 2008 the productivity began to decline. So you mentioned the excess capacity related to the great financial crisis.

And then productivity began to climb. Around 2009, around the time of QE–1, it modestly began to decline. And then in QE–2 it plummeted. And then it has kind of been like this, kind of lackluster, staying about the same on net since the end of QE–2.

[The chart titled "Has the Fed's QE Stifled Productivity Growth?" appears in the Submissions for the Record on page 45.]

So what you're saying, that the excess capacity associated with the Recession had to shake itself out, doesn't make sense to me that between 2007 and 2009 productivity would have grown so robustly.

Chair Yellen. So I believe what happened is we had a huge financial crisis. Firms found their sales collapsing, and they took measures that they thought were necessary for business survival. And that meant firing every worker that a company could possibly do without.

And because layoffs were so huge, we saw a surge in productivity. They cut workforce to the bone and productivity surged. And those productivity gains continued for awhile. But eventually the amount of labor that firms had was so low relative to their output that, as hiring picked up and their sales picked up, productivity growth then subsided.

There was a huge surge at the beginning as firms did everything in their power to cut costs, and it's not largely a reflection of trends having to do with investment.

Senator Cassidy. And then so for the specific question, if a company has a chance to go, as Mr. Greenspan—it wasn't related to this, so you may say that's not what he meant and I'll accept that—but he said, if a CEO could go to his board and say we need to either make a long, a 30-year investment with all the uncertainty of interest rates and regulatory environment, et cetera, versus invest in these financial instruments, that they are choosing the financial instruments over the productivity, would you say that's true and relevant? True and unrelevant? Or not true?

Chair Yellen. I mean I think we do see a short-term focus in business decision making that is disturbing. And the causes of that I think are not clear. And I certainly do not think it is our monetary policy, but it is true that businesses seem reluctant to commit to projects.

In part, it suggests that they do not see that many projects that they think will produce returns that justify those investments. And it is conceivable that, you know, we see evidence. The pace of technological change has diminished, and it may be partly a reflection of that.

Senator Cassidy. Thank you. I yield back.

Chairman Coats. Thank you, Senator.

Well, I think we have come to the end of the session here. I just want to say that it has been a privilege for me to chair this Committee. There are very few joint committees where House and Senate Members gather together to address a particular topic or subject, and this is one of them.

We have had a wealth of experienced and informed witnesses that have come before us on a variety of topics affecting our national economy and economic issues.

We have made our records available to all House Members and Senate Members, and to the general public. I want to personally thank my colleagues, most of whom have left here.

Thank you, Senator Lee, for staying.

But also the staff. We have just had a marvelous staff, working together in a bipartisan, bicameral way, and that is not the norm here in the Congress but it is a pleasure to do that. And the respect that I have for that staff and their working together is enormous.

I want to give special thanks to Chair Yellen. She is our star witness. We have had many wonderful witnesses that have come before us here, but she is the star because the coordination between the Congress and the Legislative Branch and the Fed is extremely important to the economic future of our country.

Chair Yellen has been more than available to come here and speak with us, and deal with all the questioning that takes place, to better explain the role of the Fed in relationship to the role of the Congress and the Legislative Branch has been transparent. And as you have listened this morning, very thorough with her answers to our questions that have been raised.

And so I just want to thank her for her availability. I wish you the best of success going forward in the future of our economy, as much of it falls to obviously both areas here, the Legislative as well as the Administrative. But the Fed plays a very important role, and we certainly have learned a lot more about what the Fed is doing, and your leadership, and we thank you.

Chair Yellen. Thank you, Senator. I really appreciate your kind words and want to say how much I appreciate your inviting me here to testify, and how much I have enjoyed cooperating with you, and appreciate your leadership and wish you the best in the future.

Chairman Coats. Thank you. My parting gift to you, knowing how busy you are, is that we are actually adjourning early.

[Laughter.]

We will at least give you more lunch time.

Chair Yellen. Thank you, Senator.

Chairman Coats. With that, this meeting concludes.

(Whereupon, at 11:42 a.m., Thursday, November 17, 2016, the hearing was adjourned.)

SUBMISSIONS FOR THE RECORD

PREPARED STATEMENT OF HON. DAN COATS, CHAIRMAN, JOINT ECONOMIC COMMITTEE

The committee will come to order. I would like to welcome everyone to today's hearing, especially Federal Reserve Chair Janet Yellen.

The Joint Economic Committee has a long tradition of receiving regular updates from the Chair of the Federal Reserve, and we are pleased to hear your insight once again before this Congress adjourns.

While we have seen some encouraging metrics of economic performance over the past year, the next Congress and the next Administration will still face a number of challenges.

Eight years after a deep recession, we are still looking for a higher rate of GDP growth, stronger productivity growth, and increased work opportunities for prime-age workers.

Low interest rates have historically been the prescribed treatment for a weak economy.

However, the past seven years have clearly taught us that low interest rates alone cannot cure an ailing economy.

In response to this continuing challenge of stimulating growth to a more desired level, there seems to be a growing consensus forming that tax and regulatory reforms, plus fiscal stimulus measures such as targeted infrastructure initiatives, are necessary ingredients to incentivize capital investment and GDP growth.

But as we pursue these policy changes, we also have to be mindful of a nearly $20 trillion national debt that looms ominously over the U.S. economy.

Where debt-to-GDP stood at 39.3 percent in 2008, it will total 76.6 percent by the end of this year, according to CBO, and will climb to 85.5 over the next 10 years.

We look forward to hearing your thoughts on the economic outlook, as well as the types of policies you feel Congress should be considering at this time.

PREPARED STATEMENT OF REPRESENTATIVE CAROLYN B. MALONEY, RANKING DEMOCRAT, JOINT ECONOMIC COMMITTEE

This likely is the last hearing of the Joint Economic Committee in the 114th Congress. I'd like to thank Chairman Coats for his stewardship of the JEC, and for holding a number of very interesting hearings that have generated excellent discussion. I'd also like to thank my colleagues on both sides of the aisle.

I am particularly pleased that we are ending on a high note with Federal Reserve Chair Janet Yellen. Chair Yellen, I think it's fair to say that all my colleagues warmly welcome you to this hearing and look forward to hearing your thoughts at this critical time.

I'd like to begin by thanking you for your extraordinary and careful leadership of the Federal Reserve. The Fed has played a critical role in helping our country recover from the worst recession since the Great Depression. Your steady hand has built on the work of your predecessor and has guided the economy forward. Thank you.

Much has changed since you appeared before this Committee about a year ago:

- The economy has continued to strengthen.
- The labor market has continued to improve.
- Wage growth has been the strongest since the recession.
- Household income has had the largest annual increase since Census began tracking this data.
- Inflation has edged up, though it remains below the Fed's 2 percent target.

These are among the "tea leaves" of the economy—and everyone here is eager to find out how you read them.

Up until very recently, it was widely assumed that the Federal Open Market Committee would raise interest rates at its next meeting, less than a month from today. Some of your past statements have indicated that this is a possibility, or even a goal.

But then came a thunderbolt on November 8th. Many critical things about our country changed literally overnight. Our world has been turned upside down.

The question everyone would like to know is how the Federal Reserve will steer through the days ahead.

One particular challenge is that the President-elect has called for policies that may have countervailing effects.

History has shown us that the type of tax cuts candidate Trump has proposed disproportionately benefit those who don't need them and dramatically increase our national debt.

I'm also curious to see how President-elect Trump's infrastructure plan will be reconciled with the Republican Congress' past—and fierce opposition—to fiscal stimulus.

There is a great deal of uncertainty about fiscal policy and this leads to uncertainty for markets, businesses and the economy overall.

One constant that I hope we can count on is monetary policy that remains insulated from political attacks and attempts to meddle with Fed independence.

THE CRITICAL ROLE PLAYED BY THE FED

The election could also have a direct effect on the Fed itself. The President-elect's comments on this subject have been somewhat contradictory—he has stated both that the current low interest rates are good for the economy and that the Fed was being political in keeping them at these levels.

In Congress, some have called for revolutionary changes for the Federal Reserve. Changes that would affect the very nature of the institution. Changes that in my opinion would lead to disaster.

For those who would like to restrict the independence of the Federal Reserve, I think it's important to briefly review that immense benefit of an independent Federal Reserve. We only have to look back a few years.

When President Obama took office, he inherited what former Fed Chairman Ben Bernanke called "[. . .] the worst financial crisis in global history, including the Great Depression."

The Federal Reserve quickly acted to lower rates to almost zero and has held them there for about eight years. It instituted several rounds of quantitative easing to further stimulate the economy.

This action by an independent Federal Reserve was critical to our recovery. Economists Alan Blinder and Mark Zandi found that efforts by the Federal Reserve and the Obama Administration—with support from Democrats in Congress—dramatically reduced the severity and length of the Great Recession.

RECENT ATTEMPTS TO UNDERMINE FED INDEPENDENCE

With control of the legislative and executive branches, past Republican efforts to limit the Fed's independence may gain momentum.

Last year, Republicans in the House passed legislation—the FORM Act—that would fundamentally hamper the Fed's ability to conduct monetary policy.

It would limit the Fed's independence by forcing it to determine target interest rates using a mathematical formula, while ignoring a broad range of important economic indicators.

Chair Yellen, as you have noted before, if the Fed had been forced to follow such a rule in recent years, quote "[. . .] millions of Americans would have suffered unnecessary spells of joblessness over this period."

Another proposal is to jettison the Fed's mandate to try to maximize employment, and instead focus solely on inflation. I'm not sure that people in Michigan, Pennsylvania and other states would respond well to that suggestion. But if that's the conversation my colleagues want to have, let's have it today.

CONCLUSION

The past nine plus years, going back to the start of the recession in 2007, have been an extraordinary period in U.S. economic history. We should continue to study and learn from it.

We are not out of the woods by any stretch. When the next recession hits, as it surely will, what will the monetary response look like? Will the Fed have the tools to restore growth? Will it turn to quantitative easing? What other effective policy tools will the Fed have at its disposal?

I want to make one final point. The Federal Reserve has been at the center of the U.S. and global economic recovery. Efforts to hamstring the Fed are misguided. Just as efforts to politicize it are wrong-headed.

Chair Yellen, thank you for appearing before the Joint Economic Committee today. I look forward to your testimony.

PREPARED STATEMENT OF HON. JANET L. YELLEN, CHAIR, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Chairman Coats, Ranking Member Maloney, and members of the Committee, I appreciate the opportunity to testify before you today. I will discuss the current economic outlook and monetary policy.

THE ECONOMIC OUTLOOK

The U.S. economy has made further progress this year toward the Federal Reserve's dual-mandate objectives of maximum employment and price stability. Job gains averaged 180,000 per month from January through October, a somewhat slower pace than last year but still well above estimates of the pace necessary to absorb new entrants to the labor force. The unemployment rate, which stood at 4.9 percent in October, has held relatively steady since the beginning of the year. The stability of the unemployment rate, combined with above-trend job growth, suggests that the U.S. economy has had a bit more "room to run" than anticipated earlier. This favorable outcome has been reflected in the labor force participation rate, which has been about unchanged this year, on net, despite an underlying downward trend stemming from the aging of the U.S. population. While above-trend growth of the labor force and employment cannot continue indefinitely, there nonetheless appears to be scope for some further improvement in the labor market. The unemployment rate is still a little above the median of Federal Open Market Committee (FOMC) participants' estimates of its longer-run level, and involuntary part-time employment remains elevated relative to historical norms. Further employment gains may well help support labor force participation as well as wage gains; indeed, there are some signs that the pace of wage growth has stepped up recently. While the improvements in the labor market over the past year have been widespread across racial and ethnic groups, it is troubling that unemployment rates for African Americans and Hispanics remain higher than for the nation overall, and that the annual income of the median African American household and the median Hispanic household is still well below the median income of other U.S. households.

Meanwhile, U.S. economic growth appears to have picked up from its subdued pace earlier this year. After rising at an annual rate of just 1 percent in the first half of this year, inflation-adjusted gross domestic product is estimated to have increased nearly 3 percent in the third quarter. In part, the pickup reflected some rebuilding of inventories and a surge in soybean exports. In addition, consumer spending has continued to post moderate gains, supported by solid growth in real disposable income, upbeat consumer confidence, low borrowing rates, and the ongoing effects of earlier increases in household wealth. By contrast, business investment has remained relatively soft, in part because of the drag on outlays for drilling and mining structures that has resulted from earlier declines in oil prices. Manufacturing output continues to be restrained by the weakness in economic growth abroad and by the appreciation in the U.S. dollar over the past two years. And while new housing construction has been subdued in recent quarters despite rising prices, the underlying fundamentals—including a lean stock of homes for sale, an improving labor market, and the low level of mortgage rates—are favorable for a pickup.

Turning to inflation, overall consumer prices, as measured by the price index for personal consumption expenditures, increased 1¼ percent over the 12 months ending in September, a somewhat higher pace than earlier this year but still below the FOMC's 2 percent objective. Much of this shortfall continues to reflect earlier declines in energy prices and in prices of non-energy imports. Core inflation, which excludes the more volatile energy and food prices and tends to be a better indicator of future overall inflation, has been running closer to 1¾ percent.

With regard to the outlook, I expect economic growth to continue at a moderate pace sufficient to generate some further strengthening in labor market conditions and a return of inflation to the Committee's 2 percent objective over the next couple of years. This judgment reflects my view that monetary policy remains moderately accommodative and that ongoing job gains, along with low oil prices, should continue to support household purchasing power and therefore consumer spending. In addition, global economic growth should firm, supported by accommodative monetary policies abroad. As the labor market strengthens further and the transitory influences holding down inflation fade, I expect inflation to rise to 2 percent.

MONETARY POLICY

I will turn now to the implications of recent economic developments and the economic outlook for monetary policy. The stance of monetary policy has supported improvement in the labor market this year, along with a return of inflation toward the FOMC's 2 percent objective. In September, the Committee decided to maintain the target range for the federal funds rate at ¼ to ½ percent and stated that, while the case for an increase in the target range had strengthened, it would, for the time being, wait for further evidence of continued progress toward its objectives.

At our meeting earlier this month, the Committee judged that the case for an increase in the target range had continued to strengthen and that such an increase could well become appropriate relatively soon if incoming data provide some further evidence of continued progress toward the Committee's objectives. This judgment recognized that progress in the labor market has continued and that economic activity has picked up from the modest pace seen in the first half of this year. And inflation, while still below the Committee's 2 percent objective, has increased somewhat since earlier this year. Furthermore, the Committee judged that near-term risks to the outlook were roughly balanced.

Waiting for further evidence does not reflect a lack of confidence in the economy. Rather, with the unemployment rate remaining steady this year despite above-trend job gains, and with inflation continuing to run below its target, the Committee judged that there was somewhat more room for the labor market to improve on a sustainable basis than the Committee had anticipated at the beginning of the year. Nonetheless, the Committee must remain forward looking in setting monetary policy. Were the FOMC to delay increases in the federal funds rate for too long, it could end up having to tighten policy relatively abruptly to keep the economy from significantly overshooting both of the Committee's longer-run policy goals. Moreover, holding the federal funds rate at its current level for too long could also encourage excessive risk-taking and ultimately undermine financial stability.

The FOMC continues to expect that the evolution of the economy will warrant only gradual increases in the federal funds rate over time to achieve and maintain maximum employment and price stability. This assessment is based on the view that the neutral federal funds rate—meaning the rate that is neither expansionary nor contractionary and keeps the economy operating on an even keel—appears to be currently quite low by historical standards. Consistent with this view, growth in aggregate spending has been moderate in recent years despite support from the low level of the federal funds rate and the Federal Reserve's large holdings of longer-term securities. With the federal funds rate currently only somewhat below estimates of the neutral rate, the stance of monetary policy is likely moderately accommodative, which is appropriate to foster further progress toward the FOMC's objectives. But because monetary policy is only moderately accommodative, the risk of falling behind the curve in the near future appears limited, and gradual increases in the federal funds rate will likely be sufficient to get to a neutral policy stance over the next few years.

Of course, the economic outlook is inherently uncertain, and, as always, the appropriate path for the federal funds rate will change in response to changes to the outlook and associated risks.

Thank you. I would be pleased to answer your questions.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

JANET L. YELLEN
CHAIR

January 6, 2017

The Honorable Amy Klobuchar
United States Senate
Washington, D.C. 20510

Dear Senator:

Enclosed are my responses to questions 2 and 3 that you submitted following the November 17, 2016,[1] hearing before the Joint Economic Committee. A copy has also been forwarded to the Committee Clerk for inclusion in the hearing record. A response to the remaining question will be forthcoming.

Please let me know if I can be of further assistance.

Sincerely,

Janet L. Yellen

Enclosure

[1] Questions for the record related to this hearing were received on November 29, 2016.

QUESTIONS FOR THE RECORD AND RESPONSES OF CHAIR JANET YELLEN SUBMITTED BY SENATOR AMY KLOBUCHAR

2. Infrastructure Investment

There's an economic imperative to fixing our infrastructure: businesses rely on our transportation network to move goods to market. In 2013, the American Society of Civil Engineers estimated that inefficiencies in infrastructure are expected to drive up the cost of doing business by an estimated $430 billion over the next decade.

Please discuss how improving U.S. infrastructure including our broadband network can benefit the U.S. economy and our global competitiveness.

How would increasing investment in infrastructure help the labor force participation rate, lower the underemployment level, and address income inequality?

As noted by the Congressional Budget Office (CBO), productive investment in public infrastructure can provide benefits for the economy and society more broadly.[1] Infrastructure investment can boost productivity and, in turn, raise economic output, although the CBO notes that these positive effects tend to occur only gradually. Of course, greater productivity and a larger U.S. economy would also improve our competitiveness in the global economy. To the degree that infrastructure investment leads to an expansion in U.S. economic activity, one would also expect that domestic labor market conditions would further improve—all else equal, there would tend to be incentives for workers to join or remain in the labor force and there would be downward pressure on the unemployment rate. Greater productivity and an even stronger economy would also likely show through to higher wages for many lower- and middle-income workers, which could help ease income inequality somewhat. However, the CBO's analysis appears to indicate that plausible increases in federal infrastructure spending would probably not be a panacea for either the low rates of productivity growth or the increases in income inequality seen in recent years. As a result, it would seem likely that fiscal policymakers would want to consider a number of possible policies to address the issues of low productivity growth and rising income inequality.

3. Income Inequality

In the 113th Congress, the Joint Economic Committee examined the economic impacts widening income inequality which does not just mean those Americans at the top or the bottom of the income distribution, but also includes impacts on those in the middle of income distribution—the middle class.

While the recovery has been strong with low unemployment rates, increased earnings, and GDP growth, the benefits of the recovery have not been equal across income distribution levels or regions.

For example, in your testimony you noted that for Hispanics and African-Americans the unemployment rate is higher and the median household incomes are lower than for the nation overall. And we know that parts of the country are lagging behind in the recovery.

What do you see as the impact of income inequality on those in the middle of the income distribution and what is the overall effect of growing income disparity?

What are the possible long-run consequences of continued or widening income inequality for the economy?

Why have we seen a rise in income inequality over the past decades? What can be done to reverse this trend?

Please discuss policy options that would benefit those who have not seen the effects of the recovery in their region.

Rising economic inequality is of great concern to me, and in fact, I discussed this subject in one of my earliest speeches as Chair of the Federal Reserve, in October 2014. Widening inequality in recent years has been associated with "polarization" in the labor market, with many middle class families finding that even when jobs are available, those jobs do not pay what they are accustomed to earning. There can be direct macroeconomic effects from this sort of rising income inequality, if lower- and middle-income earners are not able to spend, invest in a home, or invest in education as they would have under better circumstances. Research has also shown that greater income inequality is associated with diminished intergenerational mobility. Thus, there may be important harmful long-run economic consequences of

[1] See, for example, Congressional Budget Office, "The Macroeconomic and Budgetary Effects of Federal Investment," June 2016; "Approaches to Make Federal Highway Spending More Productive," February 2016; and "Public Spending on Transportation and Water Infrastructure," March 2015.

such inequality—for example, if people believe they cannot get ahead, they may not even want to invest time and money in their education and training. And beyond the purely economic effects, I worry that greater inequality can be associated with a loss of social cohesion and I think it is appropriate to ask whether this trend is compatible with values rooted in our nation's history, among them the high value that Americans have traditionally placed on equality of opportunity.

Rising inequality began decades before the recession and is likely due to a variety of factors. For example, labor earnings—which are the largest component of most households' incomes—have become increasingly unequal since the early 1980s, as real wages for higher-wage and more educated workers have pulled away from those in the middle and at the lower end of the distribution. The causes of rising earnings inequality are complex, but available research suggests that shifts in the demand for workers toward those with higher education and a more versatile skill-set have been an important contributor, as have changes in the minimum wage, declining unionization and executive compensation practices.

Recessions tend to exacerbate earnings inequality, as low- and middle-income wage earners tend to experience larger increases in unemployment and larger declines in household income than their higher-earning counterparts. Recessions also have a very noticeable effect by race, for example, as the Board noted in the most recent Monetary Policy Report. Unemployment among Hispanics and African-Americans is higher than the national average and median incomes are lower in all years, and those outcomes are more sensitive to overall macroeconomic conditions. For example, while median incomes for White households fell about 7 percent between 2007 and 2012, the corresponding decline for African-American families was more than 15 percent.

In the past several years, the economy has expanded and unemployment has fallen impressively. For example, unemployment rates are back near pre-recession levels across all race groups. This gives me hope that continued stable economic growth, supported by monetary policy, will continue to benefit Americans across the economic spectrum. Beyond this important contribution, however, monetary policy is not well placed to address many of the underlying causes of inequality, and I encourage the Congress as well as policymakers in state and local governments to consider other policy approaches. In my 2014 speech, for example, I highlighted some potential "building blocks" for greater economic opportunity; these included strengthening the educational and other resources available for lower-income children, making college more affordable, and building wealth and job creation through strengthening Americans' ability to start and grow businesses. I view inequality as a central concern for our nation's economic future, and I believe that these and other policy approaches deserve close scrutiny.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

JANET L. YELLEN
CHAIR

February 2, 2017

The Honorable Amy Klobuchar
United States Senate
Washington, D.C. 20510

Dear Senator:

Enclosed is my response to question 1 that you submitted following the November 17, 2016,[1] hearing before the Joint Economic Committee. On January 6, 2017, I provided a response to questions 2 and 3. A copy has also been forwarded to the Committee Clerk for inclusion in the hearing record. This constitutes completion of my responses to all of your written questions submitted.

Please let me know if I can be of further assistance.

Sincerely,

Janet L. Yellen

Enclosure

[1] Questions for the record related to this hearing were received on November 29, 2016.

QUESTIONS FOR THE RECORD AND RESPONSES OF CHAIR JANET YELLEN SUBMITTED BY SENATOR AMY KLOBUCHAR

1. Community Banks and Credit Unions

Minnesota strongly relies on a network of community banks and credit unions which provide credit for many small businesses and farms. Yet, the overall number of community banks is declining and consolidation in the banking sector has played a role.

I support the Dodd-Frank reforms that protect our financial system against the abuses of the past while preventing a crisis in the future. But we also must ensure that we have a strong community banking and credit union sector.

In your testimony before the House Financial Services Committee in September 2016 you noted that the risks for small community banks and large, systemically important financial institutions are not the same. And that the Federal Reserve, "would be able to address [some of the] concerns [of community banks] as part of the normal safety-and-soundness supervisory process."

What steps can the Federal Reserve take to help ensure a strong community bank and credit union sector? How can the Federal Reserve work together with the other community bank prudential regulators, specifically the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency (OCC), and the National Credit Union Association (NCUA) to ensure that community banks and credit unions are able to continue to serve small businesses and rural America? What rules or regulations could be reviewed, adjusted or revised to better tailor the regulation of community banks and credit unions to the potential risks posed by this sector of the financial services industry?

Community banks[1] play a critical role in the U.S. and regional economies, and the Federal Reserve is mindful of the impact of regulatory burden on community banks. In particular, community bankers have indicated that as costs associated with regulatory compliance increase, these increased costs can contribute, along with other factors, to industry consolidation.

The Federal Reserve is guided by the principle that regulations should promote the safety and soundness of individual financial institutions but also be tailored to their risks. With respect to its supervisory responsibilities for community banks, the Federal Reserve considers ways to tailor the rules and supervisory program for these banks based on their risk profile, size, and complexity. Tailoring the supervisory program allows the Federal Reserve to achieve its goal of promoting a strong banking system and preventing or mitigating against the risks of bank failures while minimizing regulatory burden to community banks.

In carrying out its responsibilities, the Federal Reserve has collaborated, and continues to collaborate with, other banking agencies on major aspects of bank supervision such as the development of policy guidance and on-site examinations. For example, a large portion of the guidance that impacts community banks is developed on an interagency basis through the Federal Financial Institutions Examination Council (FFIEC) to promote consistency in the supervision of community banks. Further, to reduce the burden of on-site examinations, the Federal Reserve coordinates with state agencies on the majority of on-site examination work. For example, since 1981, the Federal Reserve and state regulators have examined healthy community banks on an alternating schedule, with the Federal Reserve examining one year and the state the next. The Federal Reserve Board and state regulators also regularly conduct joint examinations and participate in each other's examinations in an effort to reduce burden on their regulated financial institutions.

Along with the other members of the FFIEC, the Federal Reserve has considered and is considering the comments received as part of the regulatory review started in 2014 conducted pursuant to the Economic Growth and Regulatory Paperwork Reduction Act of 1996 (EGRPRA). This decennial review, which is a joint effort between the Federal Reserve, OCC, and FDIC (collectively, the Agencies), has generated over 230 public comments submitted in response to four Federal Register notices. Additional comments were received from bankers, consumer and community groups, and the public through six outreach meetings held in 2014 and 2015 in Los

[1] Generally, the Federal Reserve defines the community banking organizations that it supervises as those state member banks, bank holding companies, and savings and loan holding companies with consolidated assets totaling less than $10 billion. In conducting its supervision of these organizations, the Federal Reserve coordinates closely with the Federal Deposit Insurance Corporation (FDIC) and Office of the Comptroller of the Currency (OCC). The Federal Reserve is not involved in the supervision of state and federal credit unions, which are regulated and insured by the National Credit Union Administration (NCUA).

Angeles, Dallas, Boston, Kansas City, Chicago, and the Washington, D.C., area. While the Federal Reserve continues to evaluate these comments and work with the other agencies, the Federal Reserve has taken action on certain issues raised in public comments, such as:

- Proposing burden reductions to the Call Report such as a streamlined report for noncomplex institutions with total assets of less than $1 billion;[2]
- Issuing an interagency advisory clarifying when a real estate evaluation can be conducted in lieu of an appraisal;[3]
- Clarifying through supervisory guidance that community and regional banking organizations[4] are not expected to have stress testing models and processes that are as sophisticated as those at the CCAR firms,[5] tailoring the stress testing rule requirements by allowing them more time to conduct stress tests each year, and requiring less detailed reporting and public disclosure than larger firms;
- Communicating supervisory statements that make clear that community banks will not be required to build costly or complex models, or to engage third-party service providers, to comply with the new accounting standard for credit losses issued by the Financial Accounting Standards Board;[6] and
- Tailoring the Volcker rule to reduce burden on community banks by adjusting the compliance program and reporting requirements based on the size and level of covered activity of a banking entity.

In addition, the Federal Reserve has taken steps to ease the burden associated with community bank examinations, including improving examination efficiency by:

- Using existing bank financial data to identify banking organizations with high-risk activities, which allows the Federal Reserve to focus our supervisory efforts and reduce regulatory burden on banking organizations with less risk;
- Leveraging technology to conduct more examination work off-site;[7]
- Simplifying and tailoring pre-examination requests for documentation;
- Helping community bankers more easily identify new regulations or proposals that are applicable to their organizations; and
- Providing implementation guidance and extensive training for examiners, and performing internal reviews and studies, to ensure that rules and guidance are properly interpreted and applied consistently to all community banks.

Under the Basel III agreement, banks will have to increase their capital reserve holdings. I am concerned that these requirements will weaken the ability of community banks to make loans to the small businesses and farms they serve. What can the Federal Reserve do to recognize the different risks posed to the financial system by community banks as the Basel III regulatory framework is implemented?

In general, the Board's Basel III rulemaking increased capital requirements for Board-regulated institutions, improving the resiliency of individual firms and thus enhancing overall financial stability. The revised regulatory capital rules did not increase the general risk-based factor applicable to corporate exposures or loans to individuals, which includes those that are exposures to small businesses and farms. The Board considered the many comments received during the Basel III rulemaking process, and took action to ensure that application of the rule would be tailored. In addition, many of the rule's stricter and more complex elements, such as the countercyclical capital buffer, the supplementary leverage ratio, full recognition of accumulated other comprehensive income, the market risk requirements, and certain public disclosure requirements, only apply to larger and more complex banking organizations. Community banking organizations also are not subject to the enhanced standards that larger bank holding companies face related to capital planning, stress testing, liquidity and risk management requirements, and capital surcharges. The Federal Reserve, therefore, holds community banking organizations to different overall standards than larger and more complex firms.

More recently, comments received through the EGRPRA process have argued in favor of additional revisions to the regulatory capital requirements. Commenters have argued that simpler capital rules are needed to reduce the compliance burden

[2] 82 FR 2444 (January 9, 2017).
[3] See: http://www.federalreserve.gov/newsevents/press/bcreg/20 l 60304a.htm.
[4] Regional banking organizations are generally defined as companies with total consolidated assets between $10 billion and $50 billion.
[5] Those firms that are a part of the Comprehensive Capital and Analysis Review (CCAR) program.
[6] SR Letter 16–12.
[7] SR Letter 16–8.

on smaller institutions because the burden is disproportionate to the benefits of the framework's increased risk sensitivity. Commenters have further asserted that the greater detail of the revised regulatory capital rule can require a degree of categorization, recordkeeping, and reporting that can be particularly costly for community banks. The Federal Reserve is working together with the other Federal banking agencies to identify potential simplifications to the capital requirements that would be consistent both with the safety and soundness aims of prudential regulation and with statutory requirements, such as section 171 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

JANET L. YELLEN
CHAIR

January 6, 2017

The Honorable Ted Cruz
United States Senate
Washington, D.C. 20510

Dear Senator:

Enclosed are my responses to the written questions you submitted following the November 17, 2016[1], hearing before the Joint Economic Committee. A copy has also been forwarded to the Committee Clerk for inclusion in the hearing record.

Please let me know if I may be of further assistance.

Sincerely,

Janet L. Yellen

Enclosure

[1] Questions for the record related to this hearing were received on November 29, 2016.

QUESTIONS FOR THE RECORD FOR CHAIR JANET YELLEN SUBMITTED BY SENATOR TED CRUZ

1. Commodity prices, in general, are in their second year of relative decline from record highs achieved in the 2014 period. In fact, just in the last week newspapers from my home state of Texas are reporting that cattle prices have reached an all-time low. Prices are also low for other agricultural commodities, such as corn and cotton. Likewise, Texas' energy industry has seen prices fall more than in half since 2014, hitting the entire regional economy.

The story of commodity prices is the story of the fluctuating dollar. Prices for primary goods traded on global spot markets, ranging from energy to metals to farm products, tend to move broadly in tandem, opposite the dollar. When the dollar is low, commodities tend to be high; when the dollar is up—as it is today with it up at least 20% since 2014—commodity prices tend to be down.

Now, to be fair, there are a number of factors that affect the cost of a product. However, if U.S. monetary authorities had kept the dollar more stable, then capital flows, commodity prices, and asset valuations would have been more stable. Instead:

Consumers have been hit by the unstable dollar coming and going: they have lower median household incomes and wealth due to the bubble and crash, have not recovered due to the record-slow recovery, and yet are paying higher prices for many essential goods.

Meanwhile, energy and agriculture businesses, investors, and workers have been whipsawed multiple times from high to lower prices.

This arrangement is dysfunctional and is the major issue preventing the economy from recovering.

The solution isn't to deflate commodities back to their earlier levels which would cause a painful recession.

The right solution is to stabilize the dollar at a healthy level to keep commodities prices stable over the long run—and provided a much needed level of certainty to both consumers and producers.

Do you not agree that if U.S. monetary authorities had kept the dollar more stable since the late 1990s, then capital flows, commodity prices, and asset valuations would have been more stable and the economy would likely be in much better shape? As part of the Fed's dual mandate—to maximize employment and stabilize prices—shouldn't a stable dollar be a concern for the Fed?

Agricultural and oil prices have declined considerably over the past couple of years. However, it is likely only some of that decline should be attributed to the rise in the dollar over that period. The dollar is only weakly correlated with commodity prices, and that correlation is often driven by other factors that influence both the dollar and commodity prices; for instance, economic weakness abroad can drive down global commodity prices while also driving up the value of the dollar. In addition to weak global demand, the commodity price decline since 2014 has been a response to strong growth in the global supply of commodities, including in the United States. Although U.S. oil production has declined over the past year, it has recently moved up and remains well above its level of early 2014. New technologies such as hydraulic fracturing have greatly increased U.S. oil production in recent years. Both beneficial weather and productivity improvements have contributed to record U.S. crops of corn and other agricultural commodities, which have put downward pressure on prices of those commodities.

As the dollar has not been the main driver of commodity price movements, it is not clear that a more stable dollar would have prevented fluctuations in commodity prices in recent years. It is also unclear whether a more stable dollar would have led to greater stability in capital flows and asset valuations. Looking around the globe and across time, fixed exchange rate regimes have not been associated with more stable capital flows and asset prices. In the long run, allowing exchange rates to be freely determined by market forces permits them to respond to changing economic conditions and to act as a stabilizing force in the economy.

Consumers generally have benefited from low and stable inflation in recent years, even as the dollar's foreign exchange value has fluctuated. The dollar's rise since 2014 has put downward pressure on import prices, contributing to low consumer price inflation that has helped to boost real incomes. More broadly, consumers and firms have benefited from the economic rebound and falling unemployment.

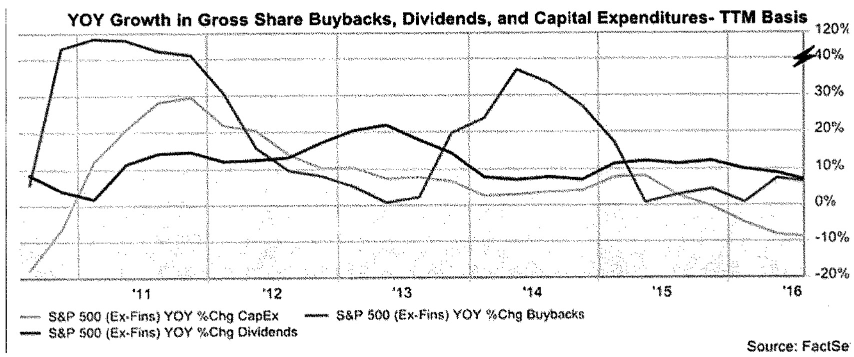
A more stable dollar likely would not stabilize commodity prices and provide certainty to consumers and producers, as commodity prices are driven by global supply and demand. Moreover, a more useful certainty for consumers and producers is to know that there will be low and stable inflation and an economy that operates near its potential. Those objectives are most likely to be achieved when Federal Reserve monetary policy remains focused on its dual mandate of price stability and maximum employment.

2. Since the end of QE3 two years ago, the dollar has risen about 20% relative to other major currencies. Your colleague at the Fed, Lael Brainard, suggests this had already had a significant tightening effect on the economy. The higher dollar has hit U.S. multi-nationals and exporters, domestic manufacturers, and commodity industries like oil and agriculture. Some believe the high dollar is creating great pressures to devalue on nations with dollar pegs such as China and Saudi Arabia.

So now the Fed is talking about hiking in December. If the Fed does tighten, do you worry about the dollar soaring another 10 or 20%. What impact do you think that will have on U.S. markets?

Factored into the dollar's current value is the market's expectation that the U.S. economy will expand in a manner that will make it appropriate for the Federal Reserve to raise rates in a cautious and gradual way over time. The appreciation of the dollar since mid-2014 partly reflects the strength of the U.S. economy compared with many of our trading partners, which has led to considerable divergence in expectations for monetary policy. A further divergence in economic conditions and policy expectations could cause the dollar to rise further.

All else equal, dollar appreciation tends to restrain U.S. exports and boost imports. This results in a more negative contribution of net exports to U.S. GDP growth. Dollar appreciation also restrains U.S. import price inflation and, consequently, overall inflation in the economy. That said, the underlying strength of demand in the United States, supported by healthy consumption growth, seems to be sufficiently robust to overcome the drag emanating from the higher dollar.


YOY Growth in Gross Share Buybacks, Dividends, and Capital Expenditures- TTM Basis
120%
40%
30%
20%
10%
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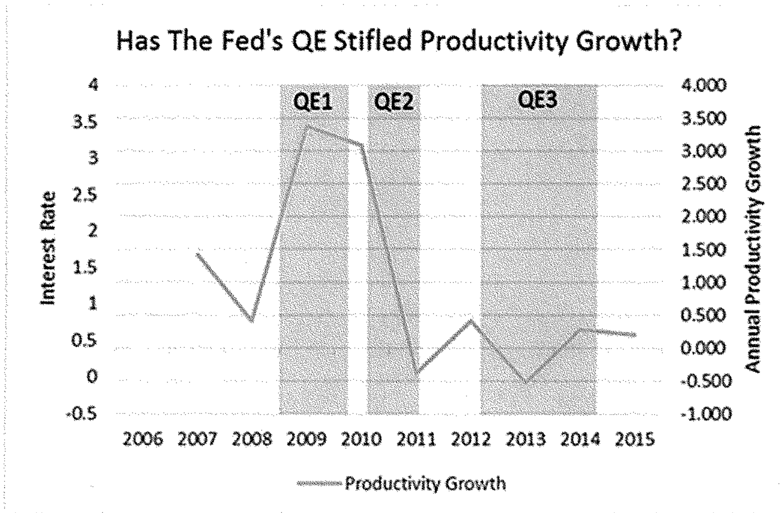
S&P 500 (Ex-Fins) YOY %Chg CapEx
S&P 500 (Ex-Fins) YOY %Chg Buybacks
S&P 500 (Ex-Fins) YOY %Chg Dividends
Source: FactSe


Has The Fed's QE Stifled Productivity Growth?
QE1
QE2
QE3
Interest Rate
Annual Productivity Growth
4
3.5
3
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2
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Productivity Growth