# THE BROOKINGS INSTITUTION FALK AUDITORIUM

# THE COUNCIL OF ECONOMIC ADVISERS: 70 YEARS OF ADVISING THE PRESIDENT

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## PARTICIPANTS:

#### Welcome:

#### DAVID WESSEL

Director, The Hutchins Center on Monetary and Fiscal Policy; Senior Fellow, Economic Studies The Brookings Institution

# JASON FURMAN

Chairman

The White House Council of Economic Advisers

# **Opening Remarks:**

#### ROGER PORTER

IBM Professor of Business and Government, Mossavar-Rahmani Center for Business and Government, The John F. Kennedy School of Government at Harvard University

### Panel 1: The CEA in Moments of Crisis:

# DAVID WESSEL, Moderator

Director, The Hutchins Center on Monetary and Fiscal Policy; Senior Fellow, Economic Studies The Brookings Institution

# **ALAN GREENSPAN**

President, Greenspan Associates, LLC, Former CEA Chairman (Ford: 1974-77)

#### **AUSTAN GOOLSBEE**

Robert P. Gwinn Professor of Economics, The Booth School of Business at the University of Chicago, Former CEA Chairman (Obama: 2010-11)

# PARTICIPANTS (CONT'D):

# **GLENN HUBBARD**

Dean & Russell L. Carson Professor of Finance and Economics, Columbia Business School Former CEA Chairman (GWB: 2001-03)

# ALAN KRUEGER

Bendheim Professor of Economics and Public Affairs, Princeton University, Former CEA Chairman (Obama: 2011-13)

# Panel 2: The CEA and Policymaking:

RUTH MARCUS, Moderator Columnist, *The Washington Post* 

#### KATHARINE ABRAHAM

Director, Maryland Center for Economics and Policy, Professor, Survey Methodology & Economics, The University of Maryland; *Former CEA Member (Obama: 2011-13)* 

# MARTIN BAILY

Senior Fellow and Bernard L. Schwartz Chair in Economic Policy Development, The Brookings Institution; Former CEA Chairman (Clinton: 1999-2001)

### MARTIN FELDSTEIN

George F. Baker Professor of Economics, Harvard University; Former CEA Chairman (Reagan: 1982-84)

# RANDALL KROSZNER

Norman R. Bobins Professor of Economics, The Booth School of Business at the University of Chicago; Former CEA Member (GWB: 2001-03)

# Panel 3: Current Economic Policy Issues:

**ALAN MURRAY** 

Editor, Fortune Magazine

#### BEN S. BERNANKE

Distinguished Scholar in Residence, The Brookings Institution; Former CEA Chairman (GWB: 2005-06)

# MICHAEL BOSKIN

T.M. Friedman Professor of Economics, Senior Fellow, Hoover Institution, Stanford University; Former CEA Chairman (GHWB: 1989-93)

# MAURICE OBSTFELD

Class of 1958 Professor of Economics, University of California, Berkeley; Chief Economist International Monetary Fund; Former CEA Member (Obama: 2014-15)

#### JOSEPH STIGLITZ

University Professor, Columbia University; Former CEA Chairman (Clinton: 1995-97)

# **Concluding Comments:**

# JASON FURMAN

Chairman, The White House Council of Economic Advisers

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# PROCEEDINGS

MR. WESSEL: Good afternoon. I'm David Wessel. I'm director of the Hutchins Center on Fiscal and Monetary Policy here at Brookings. And we're really pleased and excited to be helping the Council of Economics celebrate its 70th birthday. Of course, this is the 100th anniversary of Brookings, so we got there first, and it's also particularly a pleasure and honor for me to look here at the first couple of rows and see so many distinguished people.

My friend, Matt Slaughter, who was a member of the Council of Economic Advisers but couldn't be here today, says that good leaders are good teachers, and good teachers are good learners. And when I looked at the list of people we invited today, I reflected on just how much of the Wall Street Journal reporter I learned from members of the CEA who are here, going back to the days of Barrel Sprinkel and Mike Moussa (phonetic 00:00:59) in the late 1980s, when I came to Washington for the Wall Street Journal.

And I think that's because the most successful members of the Council of Economic

Advisers understood that part of their job was to try and make sure the press didn't screw it up too much,
and if they could improve things at the margin, that was a contribution to the public good, and for that, I
want to thank them.

The Council of Economic Advisers, as we'll hear in a few minutes from Roger Porter, is an unusual institution. It was born in controversy over economic philosophy in the Truman years. Some of the tension between the members of the original council continues today. There have been tensions about whether its role is to advise the president or advocate the president's policies.

I commend to you all the -- Chapter 7 of the Council of Economic Advisers' Annual Report of the president. We have some copies of a pre-release here, which is a wonderful history of the Council of Economic Advisers from which I learned a lot. But there was one sentence which really stopped me.

Apparently, in the early 1960s, Walter Heller's Council of Economic Advisers helped argue successfully against a plan to use nuclear explosions to widen the Panama Canal (Laughter). So, I think that alone suggests that it's been worth the money (Laughter). It's nice to know that they had dumb

ideas in the 1960s, too.

Bill Nordhaus once said that the job of a good CEA member was like that of a good gardener; 10 percent planting seeds, 90 percent pulling weeds. And I think we're going to talk about that today, because in my observations, a lot of what the CEA does that doesn't get enough recognition is stopping bad policies from happening, not only promoting good policies.

Today, we're going to have three panels with four CEA veterans on each one. Each one will be moderated by a journalist or ex-journalist, me, Ruth Marcus from The Washington Post and Alan Murray from Fortune. We asked journalists to do this, because journalists are the only people in town rude enough to keep people short enough so we can have 12 economists talk, and still get out of here in time for drinks.

I want to make clear that we invited all the chairs of the CEA to be on panels. A lot of them are here. Some couldn't make it, so we supplemented our panels with people who are members of the CEA. I want to particularly mention Charlie Schultze, who was a chairman of the Council, and was for a long time at Brookings. Unfortunately, for health reasons, he couldn't be here today.

Janet Yellen also can't be here. She's testifying before the Senate. I suspect she'd rather be here (Laughter). But in her place, I'm really happy that we have Alice Williams, who was for 51 years (Applause) on the federal payroll, many of that at the CEA. And it's exciting to see her after she retired in 2009, but she still looks 42 (Laughter).

One reason I'm particularly happy to do this at Brookings; I'm a relative newcomer here, but Brookings has particularly close ties to the CEA. Several CEA chairmen have been resident Brookings scholars here. Martin Bailey and Ben Bernanke are here now, of course, but also, Edward Norris, Arthur Okun, Herb Stein, Charlie Schultze, Joe Stiglitz, Jason Furman. Laura Tyson was a trustee of Brookings, and Martin Feldstein is on the advisory committee of my Hutchins Center.

CEA members with Brookings ties include Don Marin of the Tax Policy Center, which is a joint venture of Urban Institute in Brookings. Katharine Abraham, Ellen Blinder, Mark McClellan, Robert Lawrence, Rebecca Blank, Lesha Minell (phonetic 00:04:45), Paul Wonnacott, Kermit Gordon and Joseph Davis, and that doesn't even count all the members of the CEA who have participated in the

Brookings Panel on Economic Activity, or those like my current colleagues, Bill Gale, Ted Gayer and Louise Sheiner, who are on the staff of the CEA. So, we're very proud to be sponsoring this event.

I'm now going to turn the podium over for a moment to Jason Furman, the current chairman, and he'll come back at the end with some concluding comments, and he'll introduce Roger Porter, and we'll get underway. Thank you. (Applause)

MR. FURMAN: So, thank you so much, especially to David Wessel, who I called a couple of months ago suggesting this event. And I want to thank him in particular for not thinking particularly hard or critically, when I said the event will just organize itself (Laughter), and he won't need to actually do anything. I want to also thank Gabe Scheffler from CEA, who is the author of that excellent chapter that all of you have, and to several of the chairs who are here and not here who contributed to it, as well.

One of the great things about the CEA really is its bipartisan tradition, and in our conference room, we have pictures of all of the former chairs. And you can't sit in that room and look up at the wall and not be, one, a little bit humble, but two, think of yourself as part of a tradition and a history that is you know, not purely political, not just changing from party to party, but is grounded in you know, a strong tradition of rigorous economics, and that's what we'll hear a lot of discussion of today.

The first speaker who is leading off is Roger Porter, who is here because you know, we believe in diversity and wanted to have one speaker who hadn't been a CEA chair or member at this event today. He served for over a decade in senior economic positions in the White House in the Ford administration, and under President Reagan, as what, as I understand it, was the equivalent of being both the head of the National Economic Council and the head of the Domestic Policy Council today.

But the other thing Roger did was help bring my wife and I together, and help bring me to CEA and becoming CEA chair, and he doesn't realize the role he played in either of those. He was teaching her a class at the Kennedy School, and she was getting really excited about economic policymaking and telling me all about it. I was in economics graduate school with no plans at all to be in government, to be doing public policy.

And she got a job -- she was my girlfriend then -- she got a job in Washington. I got a

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cold call from Joe to interview me for a job at CEA, and Joe's form of an interview was talking to me for half an hour straight (Laughter). Twenty-five minutes was about how the Nehru was much lower than the fed appreciated (Laughter), and they really didn't need to raise rates. And there were a few other topics he threw in there. And then at the end, I think Michelle told me that I had gotten the job (Laughter).

And part of why I took it was, I was in love with this woman, and she was going to Washington, and part of why I took it was she had told me so much that she had learned from Roger about the role that CEA played and economic policymaking played. So, thank you for teaching her that, and for whatever you're about to share with all of us. (Applause)

MR. PORTER: Well, thank you. It's a delight to join in celebrating the 70th anniversary of the Council of Economic Advisers and to see many familiar and friendly faces.

Two years after the creation of the Council of Economic Advisers in 1946, Rexford Guy Tugwell, who was one of the New Deal's most prominent enthusiasts and a very experienced Washington observer concluded that the CEA did not possess very great survival value, and that it was vulnerable to its natural enemies and possesses no great strength of its own. He viewed it as an experiment that would finally be liquidated.

Well, the experiment survived. Of the more than four dozen entities that have been lodged at one time or another in the executive office of the president, there are only 11 which remain today. Given the nature of its roles and resources, it is interesting that the CEA has shown such resilience and staying power. This is an entity that was created by Congressional initiative.

The Truman Administration was decidedly lukewarm to the idea. The president permitted his treasury secretary, Fred Vincent, publicly to argue against the creation of a new entity, and instead, to suggest a cabinet committee which he would chair to perform the functions of the proposed council. Well, Congress charged ahead and created a council of three members: A chairman, a vice chairman and a member, all of whom had equal authority over hiring personnel and expenditures.

Truman ultimately signed the legislation, who is going to veto the employment act of 1946, and waited about six months before appointing anyone. He nominated three individuals who did ANDERSON COURT REPORTING

not know one another well, came from decidedly different perspectives, and who did not share a common vision of how the council would function.

Well, the combination was toxic. After three frustrating years, Edmund Norris, the chairman, resigned. Leon Keyserling, 25 years younger, the vice chairman, was appointed acting chairman. And six months later, nominated as chairman. But there's little evidence that the president made much use of the council. Congressional support waned. The council's modest appropriation was reduced twice, and the first Hoover commission recommended abolishing the council and replacing it with an office of the economic advisor.

The new president, Dwight Eisenhower, on the advice of his administrative assistant for domestic and economic affairs, Gabriel Hauge, invited Arthur Burns, whom he had known while serving as a president of Columbia University, to serve as his economic advisor and to make recommendations on the fate of the Council.

Eisenhower was inclined to have Burns as his economic advisor, but said he wanted Burns' best advice. After extensive consultations on the Hill and in the administration, Burns recommended, and Eisenhower approved reorganizing the council -- presidents had reorganization authority back in those days -- and making the chairman preeminent. It was Arthur Burns more than anyone else, who established the link of the Council to academia with a staff who came to the Council for a year or two years, in many respects, and then, returned to their academic pursuits.

The members as well as the staff were senior established economists. The list, over the last 70 years, is truly impressive. Staff appointments are made without reference to party affiliation; don't have to go through clearance with the White House Office of Presidential Personnel. Given the timing of presidential elections that are not linked, amazingly enough, to the academic calendar, large numbers of staff serve in administrations of different political parties. This has proven to be a great strength of the Council in establishing itself as an entity of high quality, objective and non-partisan analysis.

It's important to remember how unique as an entity the Council of Economic Advisers remains. There's nothing quite like it in the executive branch of the U.S. government, and moreover, the Council of Economic Advisers is a distinctively American invention that's not been replicated elsewhere.

During the last 70 years, Republicans have occupied the White House for 36 years, and Democrats for 34 years. They have appointed 28 chairs of the council, 14 by Republican presidents, 14 by Democratic presidents. Why has the Council of Economic Advisers survived and thrived? Well, the reasons are several and inter-related.

First, it has remained small. Even as the number of issues on which it provides advice has expanded with the growth of government activity. Small organizations tend to concentrate on the things that matter most; to keep those who work there energized, busy and motivated, and to create opportunities to build a culture of collaboration.

Secondly, the CEA has wisely resisted taking on operational responsibilities, with the exception of the wage price guidelines during a brief during the Johnson administration. A key to the CEA's success has been that it has focused on the things that it does best.

Third, for the most part is, it has avoided taking a high public profile and the inevitable controversies that accompany enhanced visibility. The Brownlow Committee report, which led to the creation of the executive office of the president in 1939, urged that the president surround himself with individuals who have a passion for anonymity, and in eschewing a high public profile, the CEA has avoided the damage to its reputation that it suffered during the final years of the Truman administration.

Fourth, it has not recruited a partisan staff. Instead, it has focused on excellence, intense commitment, and those who would bring with them, fresh thinking, who would maintain a steady flow of ideas from the best work in the academic community. A former White House chief of staff observed approvingly to me, most of the CEA members and chairs are on sabbatical, and do not provide a bureaucratic or institutionally self-serving response.

Fifth, the CEA is not viewed by its administration colleagues as a threat, nor filled with individuals who are seeking other positions. Serving on the CEA is not viewed as a stepping stone. It does, however, provide visibility at the highest levels. The last three chairs of the Federal Reserve Board, Alan Greenspan, Ben Bernanke and Janet Yellen, each previously served as CEA chairs.

The CEA has benefited enormously from carefully cultivating relationships with other administration officials. Before interviewing Walter Heller, with the help of a research assistant, I went

through what is called the President's Daily Diary, a log of all meetings involving the president, with who is with him and the number of minutes the meetings last.

I was curious regarding with whom among his economic advisors President Kennedy spent the most time. I reported to Arthur Heller a striking finding. During his second year in office, President Kennedy had spent twice as much time with Arthur Heller as he did during the first year. What could explain this?

Heller was fascinated with this statistic that was new to him. He explained that he barely knew President Kennedy when first appointed, and was relentless in his efforts to engage the president on economic policy issues. Heller suggested the creation of what he named the Troika -- the Treasury Secretary, Budget Director and CEA Chair; and the Quadriad, those three officials plus the chair of the Federal Reserve Board, and urged that it hold regular meetings with the president. Ultimately, Kennedy relented and came to enjoy the sessions.

Another key relationship for the CEA has been the individual and entity in the White House responsible for coordinating economic policy. The central role of the CEA, as Charlie Schultze reminds us, is to serve as an advocate for economic efficiency. As CEA chair, he wisely resisted Stu Eisenstadt's urging to take an office in the West Wing, and to take on the role of coordinating economic policy, as well, during the Carter years.

For the CEA chair, the relationship with the White House Economic Office is a crucial one. Viewed from outside, it appears like a relationship that could be competitive. In reality, it is far more likely to be one where these two individuals view one another as allies, and often, as trusted confidants. There had been two exchanges between these offices. Laura Tyson, after serving as CEA chair, became assistant to the president and director of the National Economic Council, and more recently, Jason Furman, the current CEA chair, served immediately before his CEA appointment as deputy director of the National Economic Council.

In one sense, the CEA and its chairman have one client and one audience, the president.

And this represents a challenge. Not surprisingly, presidents differ markedly in their interest, appetite for and understanding of economics. Three presidents have majored in economics as undergraduate:

Gerald Ford in Michigan, Ronald Reagan at Eureka College, and George H.W. Bush at Yale. Other presidents, like John Kennedy, were curious. Go out to the Kennedy Library and see the number of memos sent to him responding to his requests about, tell me about French indicative planning, et cetera. (Laughter)

At the same time, according to Walter Heller, Kennedy had a hard time keeping straight fiscal and monetary policy (Laughter). Heller told me that he offered the president a helpful suggestion. The Federal Reserve was responsible for monetary policy, which begins with an M, as did the last name of its chairman, William McChesney Martin (Laughter). Kennedy thanked him for the tip, and managed thereafter to keep fiscal and monetary policy straight (Laughter).

Well, at all times, the CEA has an important role to play. In helping the president to make informed decisions that accurately assess the real choices he faces that reflect substantive reality, as well as options that are capable of being implemented efficiently and effectively.

This creation of estimates requires both ability and integrity. Sometimes, one must approach reality carefully. The first cabinet meeting I ever attended was Herb Stein's last.

After five-and-a-half years as a member and Chairman of the CEA, he was ready to move on. Alan Greenspan's nomination would be voted on shortly. It was an opportune time to leave; prices were rising sharply at double-digit levels.

Well, the newly-sworn-in President Ford thanked him profusely for his service, and concluded by offering that whenever he wanted to come back, he would be welcome. Herb, without missing a beat graciously said, thanked him and said, well, if it's all the same to you I'll just wait until this inflation thing blows over.

Well, to deal with inflation President Ford convened a summit conference. Bill Seidman, his Assistant for Economic Policy, was put in charge of organizing it, and worked with the then newly-appointed CEA Chair, Alan Greenspan, to organize a session of 30 leading economists, most of whom had served in the government, and a majority of whom had served at the CEA. The list of invitees was carefully balanced, 15 Republicans, 15 Democrats.

The session was held in the East Room of the White House, and it lasted a full morning,

and then the President joined the gathering for an hour to listen to their conclusions. Arthur Okun, Lyndon Johnson's last CEA Chair, was chosen to present the summary. He skillfully outlined the areas where their assessments and prescriptions differed, but also where they were in agreement. Notably that economic regulation and transportation, energy, communication and financial services, among others, was contributing substantially to the inflation.

As much as any single event, that public agreement help launch a regulatory reform movement that extended for more than two decades. In Washington policy is always the product of many hands. Presidents now routinely refer to their economic policy team, and their foreign policy team. Successful teams consist of talented players who work well together; historically the CEA has proven a valuable member of that team.

For the most part, the CEA has maintained its credibility with the Congress, with the outside economic community, and with the President and the others who advise him on economic policy issues. The CEA's task is simple, if challenging. Focus on what it does well, maintain its reputation for sound and objective analysis, steer clear of operational responsibilities, maintain a fresh flow of people and ideas from the world of academia, and provide the President with the best analysis available, and its best economic judgment.

It faces a major challenge. In an era of heightened partisanship can the CEA maintain its reputation for objective analysis? Can it resist getting dragged into the Web of the White House communications machine? To what extent should it play an outside role? The tension that underlay the (inaudible) relationship, how much to defend and seek to advance the President's policies publicly, will always remain a challenge.

The CEA has survived because it fills a special niche. It brings to bear the tools of economics in a way that has special credibility. It is not tied to a department or bureaucracy or agency or outside constituency, other than economists. Life in government is not a one-way street, the CEA will thrive to the extent that it is valued, and the knowledge that it is valued, needs to come from the President and those who work closely with him.

The quality of any organization is measured in many ways, among them, the ability of the

people who are attracted to work there, and the regard with which their work is viewed and used. Organization's succeed when they concentrate on what they do best, more is not better, better is better. The CEA is an organization that has remained modest in size, agile in its willingness and ability to address a myriad of policy issues, and determined to work hard, analyze carefully, and let the chips fall where they may.

Those of us privileged to have worked closely with it, invariably come to admire it greatly. I'm among those who believe that its contributions are many and substantial, and that those contributions have benefitted the presidents that it has served so well. Thank you very much. (Applause)

MR. WESSEL: Thank you very much, Roger. If I can ask Alan Greenspan, Glenn Hubbard, and Austan Goolsbee, and Alan Krueger to join me up here, we can get going? So, what we decided to do was to try and have themes for each of the three panels, this first one, we are going to try and look at the role of the CEA and economists, in general, at moments of crisis, whether they are economic, financial, national security or national disasters.

The second one will look more at the policy process, promoting good policies ad squashing bad ones, and then the third panel will focus on take advantage of the great insights that we have here today and focus on some current economic issues. I hope we'll have time for a couple of questions on each panel, but I want to warn you that we are not going to have a lot of time, so I apologize for that.

I think what I'd like to do, if I could start with you, Glenn Hubbard, you had the -- it must have been an amazing experience to be Chairman of the Council of Economic Advisers on 9/11. What role does an economic team play at a moment like that, and what were the months like following that?

MR. HUBBARD: It's obviously a searing memory for all of us. I still remember seeing, at as CEA staff meeting, the first plane crash into the World Trade Center. I think that there are three characteristics of the CEA that really shaped response to crises like 9/11, but in addition to those three, I think the first crisis responses is really Alice Williams, (applause) who is the master of knowing what to do.

The three that I think are permanent characteristics of the CEA, your first connections,

connections to academia, connections to the private sector. The second would be the interagency process that CEA tends to have a big role in, and the third is the preparation for good ideas and the ability to kill bad ones. So for 9/11, early on, beginning that day, I think there was a lot of work on airlines, on finance, on tourism, on transportation, a lot of work jointly with the Federal Reserve, in real time.

I wrote an op-ed on why the stock market shouldn't drop so much the day it finally reopened. It dropped anyway, which marked me to market that day. My discount and cash flow of the American economy was rejected by the market. On the preparation, I think the CEA quickly stepped in to work on what became a stimulus package based on work that had already been done because of the difficult economic circumstances.

In terms of bad ideas, there were legion as they always are, a number of ideas for bailing out, I would estimate perhaps 90 percent of the American economy. We managed to kill off about 90 percent of those, but I think the CEA has all those --

MR. WESSEL: Yes, (crosstalk) percent?

MR. HUBBARD: Yeah -- all those characteristics that helped it in those times.

MR. WESSEL: Dr. Greenspan, you were, as Roger mentioned, at the CEA in the very last moments of the Nixon administration and the Ford administration, most of us don't remember crises of that time; which are the ones that you think we should remember and what did you learn from those that we can benefit from today?

MR. GREENSPAN: I think the first thing we ought to learn, is the fact that our forecasting capabilities require improvement, because taking Roger's discussion a little bit further, what went on in those meetings with the economists in 1974 was a concern about inflation. Looming in the immediate horizon is one of the greatest collapses in economic activity that any of us have experienced.

And the thing that I found most incredible was that there was no semblance of that in the economic evaluations of the individuals who talked earlier. And I remember it was a really extraordinary period because the CEA was looking at a situation in which the economy seemed to be falling apart but we didn't know why. And unless you knew why, how you would respond was impossible to conceive of.

And so we puzzled and puzzled and said, well, there are three possibilities -- there are

three possibilities; one, that it is a major inventory correction, because it had to be major in order to actually take the economy down, the extent to which it was. It was a collapse in final sales, effective demand, so to speak, in general, and finally some combination of the two.

How do you approached the problem that we were looking at, and puzzled and frightened by, how you approach that depends on what your conceptual framework, as to how the economy was functioning was faced. And my recollection is that what we did not have was the figures on gross domestic product, to then the gross national product, which covered the periods that we needed to understand and to see whether in fact there was a buildup of inventories; to see whether, in fact, there was a fall away in consumer spending.

And what we realized is that the data that we had were too late, in other words, the gross national product, which was it was in those days, was really quite delayed and really a very little capability of using during the period when it really was necessary. And so what we did at the CEA at that particular point was to try to say: How do we get the data that we need?

And we constructed in December 1974 a weekly gross national product series. Now, I'm sure very few of you out there remember that the Department of Commerce then actually has a series on retail sales, which of course picked up most of the personal consumption expenditures. Auto sales in real time, were every 10 days, so we had an idea of the significant part of what the economy was doing in real time. We had considerable data on various aspects of economy, especially if they intrude on the unemployment system, but we did not have the really fundamental numbers that we needed.

So the Council of Economic Advisers in that late month, that was December 1974, set to work to see whether it could be constructed, and indeed it was, and what was remarkable about the conclusions that came from those data, which were essentially real time, was that this was an extraordinary inventory situation, at a rate of liquidation that none of us had seen previously.

If that were, indeed, the case, then we knew what policy had to be, because inventory liquidation, by its nature, is limited. Inventories cannot go below zero, which means as you get down towards zero, the rate of decline falls, and basically the level of production or GDP moves up towards final sales. And indeed when the two of them come together inventory change, by definition, is zero.

We therefore said to President Ford, and to all of his colleagues, that we believed -- and this was in the early weeks of 1974 -- that this was an inventory recession, and that it was about to end. Now, that seemed an incredible conclusion because Ford had been bombarded by everybody through the Christmas holidays, and into the early days of 1974, as a do-nothing President when the world was falling apart. A very prominent politician whose name I will not remember very well, purposely that is, said that, it's already too late, the crisis is upon us, it's hard to know how it's going to end.

Well, they were all wrong, the whole brew of them, throughout the Congress, throughout the political system, you would have thought the world was coming upon. We were right, the people who put together this particular weekly series, saved the President from making terrible decisions, and what happened was legion to this, I've experienced this many, many times.

The number of terrible problems that are going to emerge, because of data such as those, and it's occurred many since then, get solved, and what is remarkable is the amnesia which overcomes the political system, about what they were recommending, or what they were observing. And this was the classic case. The economy turned around, nobody said anything, all of a sudden the criticism disappeared without recognition of saying, we were wrong, you were right, and the next year the gross domestic product went up over 6 percent.

Now, that was an extraordinary period of time to go through a major policy choice which the President adhered to, and it didn't get quite what he wanted because the pressures to something were there, and he did something, fortunately it was something which was temporary, and because of the changes, the fiscal changes, were temporary; they weren't permanent, we ended up with not unreasonable -- In fact, in retrospect, my judgment was: we probably had, with all the changes that occurred, subsequent to the President's initiatives, were probably not bad. It did change things to the better.

So, that was the original history of the CEA's weekly GNP figures, it was extraordinary, credible, what we did is when it became apparent that everything had turned around and there was no longer concern as we buried the CEA weekly GDP figures with honors. Thank you very much.

MR. WESSEL: Thank you. And so we'll note for the record that we will acknowledge that

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at least that one time, the economists got the forecast right. But the difference between the period you described and the period that Austan Goolsbee and Alan Krueger lived though, is that they did confront something which looked pretty scary in the economy.

And I want to ask each of you, Alan, you were at the Treasury before he was CEA;

Austan, you were at the CEA from the beginning of the Obama administration. What role did the CEA

play at that period and do you look at it as a success for economists -- a total success, or a limited success, or what?

MR. WESSEL: Austan, go first.

MR. GOOLSBEE: I mean, that was a horrible time to be at the CEA, to be in the government, and it was mixed up in the transition, so we are coming in --

MR. WESSEL: Is your mic on?

MR. KRUEGER: I think. Hello? Yes, I believe it is. It was, you know, looking back, the GDP was shrinking minus-9 percent or something for the quarter. I had a colleague, economic historian, who would call and say, the President keeps saying that the President Elect says his number goal is going to be to prevent the next depression. I said, that is his goal; he said, it's too late, and that 1974, all right. He says, too late for that, the crisis has already come, he should say he has plan to get us out of the depression that's coming.

So, it was a -- that's not the funnest time to be in the government but, you know, the role of the CEA in the government, I think, partly depends on what's the relationship of the makeup of CEA with the President, and where are there other economists in the government, and I think mostly for better, sometimes for worst, there were a lot of economists in the government. You had Larry at the NEC, you had great economists at Treasury, you had economists, really, all over the government, and one thing that feels to me like it has changed for CEA over the decades.

Many years ago when I was an undergrad I had my advisor, and I had a close relationship with Jim Tobin, and Jim Tobin loved to tell stories about the CEA when he was there under Kennedy, and it sounded like a lot of what the CEA's function was, it's they were the only economists in the government, and people would say, oh, my, god, what is this thing, the economy, get the economists

in here; and they were going to give them briefings. That was in a world where Larry is the NEC Chair, it's nothing like that. I think overall it was -- (Laughter) -- No, in a good way. He will keep us --

MR. WESSEL: We all go through that.

MR. GOOLSBEE: He will keep us on our toes, you know, on each of the issues. I think, overall, in a way it was close to an unmitigated success for economists, not that it was an unmitigated success the way the economy played out, but looking back I think we are probably pretty proud of how we were grappling with things, some of which we understood, and some of which only now, many years later, we are coming to terms with.

And mostly the economists, and especially at CEA, they came with a commitment to evidence, that was quite helpful. So, you know, if we started in on housing, the issue of their \$750 billion in negative equity, so what is going to happen? Could we write down \$750 billion, or where would that come from? Or will people walk away from these houses? There was a big effort, to go in the academic literature, what do we know about propensity to walk away from negative equity?

Well, there were a few papers; we were going to look at that, we were going to solicit input. When it came to the auto industry rescue, Alan and I were involved in that a lot. There were a lot of just fundamental economic questions like; if Chrysler goes under, what cars will current Chrysler buyers buy? Will they buy American cars? Will they not buy cars? What are the spillovers? Questions like that are political, but I think the economists did pretty well through the crisis trying to just bring their knowledge.

MR. WESSEL: Alan?

MR. KRUEGER: I can tell it was not fun time to be at the Treasury either in 2009, and there was a certain all hands on deck, which I liked because I got to do a much wider range of things. One thing which I think makes being an economic policymaker in the government during this serious crisis different, is that you are required to take actions that you ordinarily wouldn't take. And to some extent, the rules of economics get suspended in the midst of a crisis.

You know, no economic advisor would say in normal times, oh, yeah, why don't we have TARP Program, that's a really good idea, let's give some money to banks, or let's bail out a failing auto

company. But in the midst of a crisis, those kinds of actions make sense. And the analogy I like to use, if you are driving in a snowstorm, you drive differently. You know, you steer into the skid, which is not sort of what your intuition is for normal driving.

But the tricky thing is, not all of the rules are suspended, and at a certain point the rules are going to come back, you don't want to lasting harm, you know, for example, in terms of moral hazard. And, as Austan said, I think the economists during this period, served the administration well, represented the profession well. Austan alluded to the HAMP and HARP programs, which is the first thing I got thrown into when I started.

At Treasury, you know, we looked at the literature and said, we've got \$50 billion, how are we going to solve this trillion-dollar problem? And it looked like the biggest bang for the buck was to modify mortgages, and that's also the direction where private banks were going. So, we poured a lot of effort into designing a mortgage modification program, and how do you get the incentives right? And we tweaked that many times over the course of the years.

You know, the Recovery Act, people criticized it for being too big, and people criticized it for being too small. I haven't heard say it was just right, yet. But when you add it together, and the CEA after I left put together a very nice report, looking at all of the extensions to the Recovery Act, additional support for state and local governments, the 2 percentage payroll tax cuts, which we had twice, and it was a significant stimulus.

One thing I think we got wrong, and Austan and I have written about this. I was concerned that, if General Motors were to fail, it would have a systemic effect, I didn't think that was the case with Chrysler, I didn't think that Fiat would be a great partner. I was wrong. The President's actions over the advice that Austan and I were preparing, I think was the right choice to rescue and restructure Chrysler.

So I think they were the balanced changes between, what you'd say, pulling weeds and planting seeds, in the midst of a crisis. Tim Geithner always used to say when I was at Treasury, plan beats no plan. The economists are very good at knocking down plans, which has the effect of resulting in a plan which the economists didn't like, because it didn't come with particular proposal, and in the midst

of a crisis some actions are necessary.

Now, I was pleased to have knocked down some plans, we were under some pressure to bail out California. I don't know if you remember this, but in June of 2009, California issued \$0.25 billion of IOUs, California was not insolvent. California has actually done quite well, in spite of not having gotten a bailout.

And one of the real turning points for me was CIT, which was the small business lender, which had received TARP funding, and was interested in additional TARP funding, and that was kind of canary in the coal mine to me, because, again, we were under some pressure, not only from the outside but also from some members of the administration to bail out CIT a second time. Yet the system was strong enough and it survived.

Then the last thing I was going to mention is, at all times CEA and economists and the government monitor data, and I would imagine that the experience of everyone in these positions is that the data is not good enough. I remember during the H1N1 epidemic, we were worried, is this going to scare people off of shopping. And I suspect it's the case that all CEAs are pretty ingenious about using data, so one of the things we did, and I see Jim Stock and Katherine Abraham here, you know, we were worried as we were getting to the fiscal cliff in 2012, that people might realize, oh, my, god, I might get hit by the AMT.

And this would have been a huge tax increase on middleclass Americans, and we monitored using Google Trends, which I suspect we were the first CEA to do that, how many Americans were searching for the alternative minimum tax. And it reached the levels as it did around April 15<sup>th</sup>, of a normal year, so one would have to be creative, and I think more resources should be devoted to help economic policymakers to collect additional data. You know there sources like credit card data that we don't tap enough, or we do on an ad hoc basis, we should be able to do, kind of, flash surveys and things like that, and I think that's even more important in the midst of a crisis.

MR. WESSEL: Thank you. Glenn Hubbard, what about dealing with Congress, both in a crisis and not in a crisis? How much, when you were in the White House, did you do that, and was it rewarding or frustrating?

MR. HUBBARD: I think the second part is fairly easy. It's generally frustrating although it can be rewarding. I think, obviously, to the extent that the President is asking for legislation, congressional outreach is very important and if something is technical economic policy, as CEA, at least my time that was often sent to the Hill, and then of course this testimony on the annual cycle with Treasury Secretary and the Budget Director, I think congressional questions are not always the most illuminating from and economic perspective.

My most frequent answer was; thank you, Senator, I look forward to working with your staff on that problem. But I do think that outreach to members of Congress was very important for the administration.

MR. WESSEL: And Dr. Greenspan, Roger alluded to something, as did I, about the tension between being the CEA Chairman and advising the President, but also being a proponent of his policies. Did you find that tension when you were there, or was that just a figment of our imagination since we love to look for people who are in conflict?

MR. GREENSPAN: It was something I was quite concerned about when I when I arrived on the scene and instead of making me, as they ordinarily did at the time, spokesman for the President, I was just a consultant, and I stayed back. I actually said, I would much prefer to be an economist, and to be merely and advisor, I don't want to be a spokesman for the policies for the President, mainly because I wasn't quite sure, having just gone through wage and price controls, whether in fact I believed in what they were doing, and you don't want a spokesman who doesn't believe if it doesn't come through.

As it turned out, I can't think of any significant thing that President Ford actually implemented with which I disagreed. So, I had the best of all worlds in that regard, and I think it is -- I do think it is a problem that CEA chairs have because there's no conceivable way that they can agree with everything the administration is trying to implement. And I think over the years that the CEA chairs and indeed the CEA, overall, have done rather well in making that issue less significant.

I can hope, and I assume it's probably built into the nature now, that nobody believes the CEA is other than an objective group, and with the Bureau of Labor Statistics, and Bureau of Economic Analysis, are given the -- are assumed to be saying what they really believe and what the facts are. And I

think that is an extraordinary value for the CEA. Nobody believes, no matter who the president is, that was coming out of the CEA, is other than a straight economic analysis.

MR. WESSEL: Do you all agree with that? It seems to me that the BLS and the BEA are seen as civil servants, statistical agencies, but that the CEA is seen as, if you disagree with the President, you are not going to tell us, and you pretty much have to go through the White House communications machine before you talk, so that you are sort of seen as an advocate?

MR. GOOLSBEE: You've got -- I think there's some element of that --

MR. WESSEL: Turn your mic --

MR. GOOLSBEE: It's on.

MR. WESSEL: Okay. The light doesn't go on.

MR. GOOLSBEE: My experience was the communications shop in the political world doesn't -- the first thing in their mind is not "let's have the CEA go speak for the administration." It's more of the, if you Congress, or you the press are really pissed off, and you want to punch someone in the face, here, punch these guys in the face. You know, they are an economist, they'll take any -- So, the jobs numbers are like minus 800,000, minus 700,000; where there's a good one, the President wants to go out and talk about the jobs number.

So, the CEA's job is, how do you explain this really horrendously bad number that nobody wants to appear on the stage with you, and be associated with this number. Or, you know, here is some policy that's not good. The only thing that saves us is there aren't that many people in the press who care what the CEA or what the economist thinks.

So yes, you might say, ah, I got him, I caught him in a contradiction, you know, the hard policy is based on an assumption of that default rates will be, for people who are under water, but that contradicts a paper that you, yourself, wrote. Meanwhile, everyone's laughing, it's just, you are asking that question, you know.

MR. WESSEL: I think you once told me that you read a lot of the speeches that the President gave, and vetted them for economic accuracy.

MR. KRUEGER: I'm sure that's true of all CEA's, and the CEA -ANDERSON COURT REPORTING
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MR. WESSEL: Yes. And what's that like? What about when he wants to say something that's just about, you know, a little bit rosier than even you can swallow as a member of the administration?

MR. KRUEGER: I don't like the subtext of, even you. But I'll let that slide.

MR. WESSEL: Just imagine it's going to be --

MR. GOOLSBEE: Steve Braun is here, and he will testify that this was a fact.

MR. WESSEL: The way to think about this is that, no matter how bad it was for you, imagine what it would be like to be Donald Trump's CEA Chairman. (Laughter)

MR. HUBBARD: Maybe he's (crosstalk).

MR. GOOLSBEE: Don't get Glenn started. The state of the union -- was it 2010 -- It must have been 2011, we have been saying, don't get down, the U.S. remains the most productive workforce in the world. So the senior economist came in, and then when they this at CEA, they send around the parts, and people kind of fact check, and it would go through. The senior economist comes and they said, you've been saying that, and the President even took that, and now they put that in the state of the union.

And I said, that's great for us. They say, no, it's not; technically Luxembourg has higher productivity than the U.S. has. And I said, please don't tell me you sent an edit. They are like, we did send. They were suggesting that it was, the President would get up in the State of the Union and say, except for 300,000 workers in Luxembourg we remain the highest productivity -- (Laughter)

MR. WESSEL: Yes, please?

MR. KRUEGER: You know, when you are vetting the speech, it's you are working a lot with the speechwriters, and they actually appreciate it, to know where it was they were going to get criticized even though they ignored helpful suggestions like that on Luxembourg. I'll add one other thing, David, to the question you raised about being pushed out there to be a spokesman.

There is a little bit of attention because CEA has so much credibility, and the communications people know that, and when they were smart they wanted to preserve credibility. There was an occasion where I said, you know, I think this is really bad policy, and I'm happy to criticize it, but

I'm not going to say it's going to cause the earth to stop spinning, you know, if Congress goes through with this.

And you have the ability to say, you know, I'm not going to -- I'm not going to make an argument that I don't agree with, and that was fine. There is an aspect of the job which requires communicating with the public. I had the same view Alan Greenspan had, which is that the President was my one client, and that was the joy of the job providing economic advice to the President and the rest kind of went with the job.

In the President's view, he told me that there's going to be some communications aspect to the job, and he told me when he offered me the job that Austan Goolsbee was the best person in the whole administration on television, he said I would need media training. (Laughter)

MR. WESSEL: Glenn, it struck me as I was thinking about framing the question that the United States has a remarkable capacity to rise when we have a crisis, as 9/11, as 2008, as some of the stuff that happened during Alan Greenspan's term as the CEA in the White House demonstrate, but we don't do a very good job of addressing things usually, the Greenspan Social Security Commission being an exception, we don't do a very good job of addressing things that aren't yet a crisis, but will someday be if we don't do something.

Do you have views on what the CEA, and economists, in general, can do to better deliver those messages? Or is that just a fact of political reality?

MR. HUBBARD: Well, I think it is a fact of political reality, but I think there's a lot the CEA can do, it's a matter of constantly reminding the President. So in my time President Bush was very interested in Social Security reform, and that was clearly a long-term issue, not a short-term issue, and I think sometimes you have to manufacture a crisis. So I think the Greenspan Commission was in response to a manufactured crisis, having to do with cash flow deficits, even though economists would say, well, that's silly. So I think the CEA --

MR. WESSEL: In that the Social Security Trust Fund was, "in trouble."

MR. HUBBARD: Correct, correct. Even though the present value and balances were always there, which is what we would say is meaningful, by manufacturing a crisis action was taken. So I

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do think economists can be responsible for continuing to shine the light on the problems, because it's always the case that the CEA is sort of the: Who invited that kid at the party? You know, people don't really want to hear about these problems, or what economists say, so it's really, it's CEA that has that responsibility.

MR. WESSEL: I'll take a couple of questions, and then we'll have a break. Brandon has the mic, and there's one in the back too, or not. One over here and there's one over there? Why don't we take two or three, and then we'll see where we are?

MR. GOOLSBEE: While they get one, let me ask a question. Of all places in the world, this is the one place we might be able to verify this. Jim Tobin told me that when he was at the CEA, Ken Arrow was a senior economist, and that Ken Arrow said, that the thing he was most proud of in his life, was not Arrow's impossibility theorem, or anything like that, it was that at the CEA there some dispute that was happening over the Panama Canal, and they proposed -- Did you tell the story?

MR. WESSEL: No, no. Yeah.

MR. GOOLSBEE: They proposed to dig a new Panama Canal by dropping an atomic bomb. And that Arrow's job was to do the cost benefit analysis, (laughter), and that he jiggled the discount rate to get it to be a negative, and so they couldn't do it, because as they said he -- And that he had viewed that that was his highest value-add thing of his life, and I have no way to verify that.

MR. KRUEGER: Arrow told me that.

MR. GOOLSBEE: He did?

MR. KRUEGER: But I do want to note, they are building a second Panama Canal. But fortunately not by (crosstalk) --

MR. HUBBARD: Not with nuclear weapons though?

MR. GOOLSBEE: Now they are using clean energy.

MR. WESSEL: Okay. Can you top that question? Oh, Steve.

MR. BRAUN: I want to correct the canal story.

MR. WESSEL: All right. So this is Steve Braun, from the Staff for the Council.

MR. BRAUN: He visited the CEA a few months ago, and I remember you talking about

that story, I asked him directly if that was true, and he said, well, not so much killing the Panama Canal, it was killing the SST, that he was most proud of, which also happened during his tenure.

MR. WESSEL: Michele? Wait for the mic, wait for the mic. Okay? Because there's people in an overflow room, because this is the only place in the world we have CEA groupies.

SPEAKER: So this is not so much a question but as a story, just reconfirming what Austan said, which is in 1996, I was at the Democratic Convention in Chicago with Joe Stiglitz, and we were doing various meetings, Joe had been trotted out there to take to various delegations, and we get this call from Mike McCurry saying, we need Joe to brief the White House press corps. And I was like, really; about what? And he said, it's the second revision of the GDP. I was like, "What are you talking about?

He's like, just get down here. So Joe and I go dutifully running down there, and Joe goes out there and starts talking, but we discovered at the time that the news by Dick Morris had just broken, and so they tramped Joe out there, so that they didn't have to have Mike McCurry on camera during the Democratic Convention. So Joe was the biggest trooper, Joe just kept going on the GDP and he was giving it, and the press corps was screaming and, you know, saying, get him off of there. And McCurry was like, no, no, no, listen to this news, this is what's important. So Austan, I'm just reconfirming that there often times it's times when people (crosstalk).

MR. WESSEL: All right, this gentleman here has been patient. You have a high bar -- hurdle here. Okay, in the back, stand up so they can see you.

SPEAKER: I'm wondering if the current problem that we are all dealing with is over, now that we are talking about it, and that's deflation.

MR. WESSEL: Anybody want to advocate for deflation?

MR. KRUEGER: I'll say one thing. No one ever asked me the inflation rate. The whole time I was at CEA and Treasury, now it wasn't as close to zero as it is now. But I was thinking of how the job evolves over time, where that was the main concern during the Greenspan CEA.

MR. HUBBARD: I would agree that people's attention -- there was a time when you talked nothing but inflation, and you talked about everything but inflation, and now it's the deflation, I think

the probability of deflation in the American economy is pretty remote.

MR. WESSEL: Okay. Let's take, there's a gentleman over here, and then we'll one more, and then we are going to take a break so we can. If you asked a question stand up so they can see you.

SPEAKER: Secretary Geithner and other top economists have indicated that they did everything possible to prevent the crisis and to bring an economic recovery, the only thing that has not surfaced, is everything was done to help -- to bail out the banks and the economy, but what about the millions of homeowners who lost their homes, what was the big problem in helping them?

MR. HUBBARD: I actually proposed doing that, I actually put out a plan for helping homeowners, the administration didn't do it, but one could have done a lot with homeowner, it's true.

MR. WESSEL: So, Austan or Alan, I think it's a widespread perception that you thought about doing more for homeowners, couldn't find something that you thought would work, and had to settle for less results than you would have liked?

MR. GOOLSBEE: Look, in my opinion -- We can go into detail on it if you want to, and probably not.

MR. WESSEL: Good call.

MR. GOOLSBEE: We probably don't want to go that far, but I think that all of the issues that you raise, we knew about, we were talking about them. There was \$750 billion of negative equity in the system, and fundamentally Congress wasn't going to give 750 -- the government wasn't going to pay \$750 billion to subsidize it, you couldn't stick \$750 billion of losses onto the banks at that time, that would have wiped them out, and so we were going around in a circle, what are we going to do without \$750 billion, we figured we could get \$50 billion from the TARP if -- I'm not a lawyer, but you know, if you were going to look, yeah, maybe that's TARP, you know.

And we figured that the best way to do that was to try to count on this wedge that if you could -- people did not want to lose their homes, so even if they were under water, if you could get their monthly payment to be something affordable, they would keep making the payments and stay in their homes.

And that is one notable fact about the American homeowner, is their almost pathological honesty, that they could have walked away, millions of people could have walked away, and they didn't, they kept paying, and in some sense that pathological honesty hardened the minds of some of the bankers, that we would say to them, why don't you -- Why isn't it in your interest to write down principle? And they'd say, because these people are paying, you know. So it was a very hard problem, and I think the reason the actions weren't bigger and bolder, is we didn't have \$800 billion.

MR. KRUEGER: Just to add a little bit to that. I mean if we did happen to have \$800 billion lying around, I would have preferred to use it for infrastructure. It would have been extremely unfair and create, I think, problems down the road, to bailout homeowners in many cases who were irresponsible, and took on homes that they couldn't afford.

The program that Austan mentioned, the HAMP Program, that's what launched the Tea Party. So think about what the government reaction -- what the public reaction would have been to writing checks to your brother-in-law who bought a home with the expectation that the price will always go up, and or he just refinanced later on, even though it's not a home, he could necessarily afford.

So, I think that the money from the HAMP Program could have been used differently, and I would have liked to have something specific for the unemployed, but what Austan said I think was right, in that people didn't walk away in large numbers. I mean obviously some had to and some did, but if the payments became affordable, it was a problem that we were able to manage through, and if we had the \$750 billion I think we would have done much more to support the economy using it more directly spending it on infrastructure, or in other ways, frankly.

MR. HUBBARD: Just to be clear what -- I mean it was -- what I proposed was actually mass refinancing of home mortgages, so nothing like spending \$800 billion. The taxpayers had already taken the risk of Fannie and Freddie, not something I would have done, but something that was done, so there would have been a chance of fairly low cost to have a mass refinancing of home mortgages, which would have been like a giant tax cut for millions of Americans.

MR. WESSEL: Dr. Greenspan, do you want to weigh in on this? No is unacceptable.

MR. GREENSPAN: (off mic) (Laughter)

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MR. WESSEL: Oh, good. Okay. So, I think we are going to take a break; we are going to get back here in 10 minutes. You don't have to get out of your chair, because we really are going to start in 10 minutes with the second panel, with Ruth Marcus. Thank you. (Applause)

(Recess)

MR. WESSEL: Okay. I'd like to get going again. Yes, you can sit here. It doesn't matter where you sit. So, one of my goals in inviting moderators was to invite people who have been around town long enough to appreciate that administrations vary, the players in administrations vary.

And I was particularly pleased that Ruth Marcus agreed to take a break from her column covering the presidential campaign, which is certainly one of the more interesting ones in my career, because I think one can get lost when one talks about the CEA, and it's a great mind meld between nerdy economic journalists who actually care about the second revision of GDP more than Dick Morris' behavior, and The Economist, but actually the goal of this is not good economics, the goal of this is good public policy.

So, Ruth is joined up here with Katherine Abraham, who is a Former Member of the CEA in the Obama administration; Marty Feldstein who was Chairman in the Reagan administration; Martin Baily who Chairman in the Clinton administration; and Randy Kroszner who was a Member of the CEA in the Bush administration. Ruth?

MS. MARCUS: Thank you for having me. I have to confess too. I think it's a little bit of the, a journalistic case of the Benz; which is, I've been in Iowa and New Hampshire pretty solidly for the last three weeks. And then I would like to say this is a pretty good crowd, and especially if there's an overflow room; it's a pretty good crowd like a town hall in Nashua. So, that is good, but to have this kind of highfaluting discussion of the CEA, and to have just experienced three weeks' worth of stump speeches on the campaign trail, and questions that may be less -- more like: When are you going to start deporting the illegal immigrants? Or, when do I start getting my larger Social Security check?

I'm having a little bit of cognitive dissonance here, and I'm very, very pleased to be, at

least, temporarily back in the world of people who think seriously about policy. As I was coming over here I was trying to think about the President Trump or the President Sanders, or the President whoever as CEA, I was wondering, of these presidential candidates, I think I got to maybe four that I could think of, who even could tell you what the CEA was.

No less sort of, what role they imagine the CEA would play in their administration, so it will be an interesting campaign going forward. I wanted to start historically, and go -- we want to talk about the role that the CEA can play both in developing good policy and preventing bad policy, and I was struck in that excellent chapter about the history of the CEA with a story that Martin Feldstein talked about where -- I'll let him tell the whole story, but he joined forces with David Stockman to do something that does not necessarily come naturally to Republican administrations, and I think I'll let you tell the story from there.

MR. FELDSTEIN: Well, thanks very much. Well, the story that I told in my little box in this chapter is that when the tax cuts were enacted in the beginning of the Reagan administration, we had expected that the bracket creep would produce more revenue. Remember, the tax brackets weren't indexed until 1986, and the inflation rate, at the beginning of the administration, was about 10 percent, so the expectation was that rising inflation and rising incomes would push people into higher brackets, would produce substantially more tax revenue, and that would offset the tax cuts that had been enacted.

Well, Paul Volcker not only did a great job, he did a much bigger and better and faster job than anybody expected. So that by 1983 the unemployment -- inflation rate had come down from 10 percent to less than 4 percent. And while that was great news for the economy, it was terrible news for the revenue, because without an offset, we had a larger deficit than we had expected.

And so it wasn't dramatically larger, but it was substantially larger. Some of the deficit that makes things more confusing; some of the deficit we experienced at the time was because we were coming out of an economic downturn, but there was still a structural deficit, and that took some convincing to convince other members of the administration that this was a problem. And Dave Stockman, who was then the Head of the Office of Management and Budget, and I, worked on trying to persuade the President and the members of the administration that something had to be done about this,

and that we had to raise taxes. And so I think that's what you had in mind.

MS. MARCUS: But how did you go about that? What was your kind of theory of how to get the President clearly to do something that was not in his instinctive desires?

MR. FELDSTEIN: Well, I mean, the President had two different kinds of instinctive desires, one was to bring down tax rates, and he had succeeded in doing that in some sense more than he had anticipated, because what he had proposed originally was sort of met and raised by the Congress. They did more on the business tax cuts, on depreciation changes than the President had originally anticipated.

And so there'd already been a little pull back, that was supposed to be 10, 10, 10; three 10 percent tax cuts in a row, and we modified the third 10 percent to 5 percent, but that still left us with a structural deficit. When I say the President had different goals, one of his goals, which he had talked about for many years before he ran for President, when he was out speaking about economic issues, was low deficits. So he was an anti-deficit guy as well as a low-tax-rate guy, and Dave Stockman and I reminded him of where he was on that issue, and that that required some changes.

And his reaction to it was, each year that I was there, and each budget, there were tax increase. There were tax increases, but there were tax increases, on business, rather than on individuals, and there were some loophole closing, I don't remember the details, but one of the things the press enjoyed, was that I would testify, or I would give a talk, and I would say: And so we have to deal with this deficit by reducing spending and raising taxes.

And then there would be a clip of Marty saying: I'm raising taxes. And there would be a clip of the President saying: I will never raise taxes on hardworking Americans struggling to make ends meet. And that was true, and he didn't, but we also -- he also did raise taxes each year to shrink that fiscal deficit.

MS. MARCUS: Maybe we should go in chronological order. And Martin, you can tell us about --

MR. BAILY: I'm not in line on this (crosstalk)

MS. MARCUS: -- about your incredible policy triumph; or preferably, your moment where

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you couldn't stop a bad policy.

MR. BAILY: Okay. Well, the incredible triumph of course is that the economic growth during the Clinton years was really stellar, and I commiserate with Alan Krueger a few times, because we would go marching in and say, you know, another 300,000 jobs. Growth is, you know, 3 percent, 4 percent, or more. You know, it's funny because when I first went to see, and I asked a number of senior economists what kinds of things we should focus on, and they say; well, productivity has been so slow, and you've studied productivity, and CEA has a good chance, you've got to think about policies to increase productivity growth.

And I thought, well, what on earth am I really going to say when it comes down to it? Or what can the President do? But, you know, lo and behold, by 1996 productivity growth was booming. So, I'm not sure what we did, but, boy, it worked out really well.

SPEAKER: You took full credit for it?

MR. BAILY: And in fairness, I do think the policy environment, it's certainly not me, but the policy environment that was created was conducive to productivity growth, so I think there should be some credit there. A policy failure; well, I'll tell a story about that.

MS. MARCUS: Oh, good.

MR. BAILY: You know we went -- we had a lot of careful processes around anything to do with trade and free trade agreements, and stuff like that. So there were all these long, often boring NEC meetings where we'd talk about the free trade. I think CEA did a good job by the way, and making sure the numbers were better than the ones that we would get other places, let's say, let me put it tactfully that way.

But we did have one interesting experience which was that, I got into the White House, 7:30 meeting, and Sandy Berger was a little riled up. Well, it turned out that President Clinton who had been at an APEC meeting, had gone to play golf with Lee Kuan Yew and some of his senior people, and while on the golf course, Lee Kuan Yew had said, you know, it would be really great if we had a free trade agreement between Singapore and the United States.

And apparently President Clinton said; yeah, that does sound great, we should have one ANDERSON COURT REPORTING

of those, and so of course, Singapore immediately announced that we were going to have a free trade agreement between the United States and Singapore. And so Sandy had been woken up at the -- in the middle of the night, or at some early hour, because the U.S. ambassador to Chile had called him, of course Chile had been trying for years, to get a negotiation on a free trade agreement, hadn't really succeeded, and Sandy said he heard more expletives in such a short time on that phone call than he'd ever heard in his life.

And I reflected that having worked with not only the President, but with John Podesta and folks like that; that must have been a pretty high bar that he had then. Well, I guess --

MS. MARCUS: So the key to preventing that policy is, keep your principle of the golf course?

MR. BAILY: Keep your principle off the golf -- Well, he is the elected official, I mean, we do have to remember that, and we are serving at his pleasure, not the other way around. I think, quite honestly, it holds out well -- all's well that ends well, because Chile managed to get its free trade agreement when Singapore got its free trade agreement, which was signed by G.W. Bush. But, yes, we missed out a little bit on the process on that one.

MS. MARCUS: Randy, we've talked a little bit in previous panels and comments about whether CEA is better at pulling weeds or planting seeds. So, I don't know if you want to talk about pulling weeks or planting seeds, but talk about what it was like for you to do either one of those tasks, or try to?

MR. KROSZNER: I'll try to mention a little bit of both. I'll start off with the negative. As Austan had mentioned, there are a lot more economists than there used to be, and so it's great when all the economists agree across all the different agencies, but it's not always so great when they don't agree. And one of the challenges we had was an international issue of how to deal with Argentina.

So this was 2001, Argentina was in little bit of trouble, some countries may be experiencing some similar troubles now, and they were very strong, the different views, in different parts of the administration. Some were more -- you know, State Department views which were geopolitical views, there were different issues that came in, but there were differences between the Treasury and the

CEA on this.

The CEA was basically the only agency that thought that perhaps the support for a second bailout for Argentina was not going to work, and we stood our ground, we voted against, but we knew we would be outnumbered, but I remember when I left the CEA a few years later, most everyone sitting around those tables still worrying about Argentina said; well, maybe we should have listened to you two years ago. So I think if the economists don't agree, then it's a real problem, because other considerations can take precedence.

On the positive side, getting back to the positive side, thinking about crises, which is where I think CEA can be particularly helpful, because you can have a framework, and so although I think it was Alan who said that, well, the law of economics go out the window. The laws didn't go out the window, the applications may be very, very different, but we still have a framework if we think about demand curve slipping down.

So after 9/11, you know, there were a lot of people who just didn't know what to do, the political situation was completely different. The defense situation was different, but we had a framework for trying to think through problems, and just used sort of like basic cost benefit analysis.

I think Alan is exactly right, the cost benefits changed dramatically in a crisis, but it's still a framework for thinking though those kinds of things. I think the second thing that's also very helpful is to know history. So, whether it was I was at the fed, more recently, or at the Council of Economic Advisers, knowing how you respond to extreme events, and what can work, and what doesn't, I think is extremely beneficial.

And so one of the issues we faced is, should there be a government backstop for terrorism risk insurance? So the first issue was: Should the government be involved in this issue at all? Well, the government got involved in insurance back in the 1930s in deposit insurance, and obviously that is still with us today. And we at CEA thought it made sense, because there was a lot of uncertainty. We didn't know whether, new buildings would be built or not.

We didn't know whether chemical plants would be built or would have to shut down, or if storage facilities would have to be shut down. We have a lot if information that things could go terribly

wrong. We had a lot of difficulty being able to determine whether that was true or not. Were we willing to take the risk? So we decided, well, we don't think we should take the risk, but we also don't think the government should be the only supplier of this.

So let's do it so it's shared risk between the government and the private sector, structured as a temporary program, to see whether the private sector can provide it or not. And I think the most important thing was that we said, well, let's try to increase the amount of risk-sharing by the private sector each year, during the three-year temporary program. So that you would gather more data, you'd be able to see. Well, is the private sector able to handle it? Is it not? Is this causing increasing problems because part of this was from the Institute of Deposit Insurance?

People forget now the deposit insurance was a temporary program. A temporary program that's temporarily been with us for 80 or 90 years; now it looks like the terrorism risk insurance maybe with us, it's been renewed multiple time, but at least it still has a limited horizon. We thought about the incentives associated with it, we thought about gathering data, we tried to look at the long run.

And also it was very helpful, by doing it this way, that it gave us something to negotiate with in Congress. So those who wanted more, or those who wanted less, could negotiate the particulars of whether it was 5 percent the first year, 10 percent the second year, 15 percent in the third year. For us at CEA the specifics didn't matter, it was just the idea that it should be working towards a phase out, and so that was also very helpful in getting things to work --

MS. MARCUS: I'm sorry. Did you just say that you actually managed to create good policy working with Congress; because if so we should just conclude the panel now and go celebrate?

MR. BAILY: Well, first some people would disagree that, you know, the government shouldn't have been involved in the backstop at all, so I think that -- you know, I think we did the right thing at the time, because of the uncertainty. I think we are able to structure a policy to try to get out, but the policy is still with us, and they don't have that same sort of phase out in it.

MR. FELDSTEIN: I just wanted to react to your comment about what seemed like the impossibility of negotiating with Congress in accomplishing something. I have to remind myself, that during the eight years that Ronald Reagan was President, the Democrats always had an overwhelming

majority in the House. So he always had to negotiate, and yet we got a tremendous tax bill in '86, we got a Social Security reform that Alan Greenspan was critical in. We got the U.S.-Canada Free Trade Agreement, so the notion that you cannot get bipartisan agreements, at least in those years, and I can imagine going forward, it should also be possible, so I don't rule that out.

MR. BAILY: Yes. But Marty, to nitpick with you, it was a -- he was able to put together a coalition often with seven Democrats and Republicans, I think it was a somewhat different time. Not to say we shouldn't try to be bipartisan, but I think it's tougher today.

MS. MARCUS: I think it was that Ronald Reagan, Tip O'Neill, and the chairman of the Council of Economic Advisers sat down and had a drink together, was my story of how bipartisanship happened. Katherine, please answer the question that I would ask if I could speak. (Laughter)

MS. ABRAHAM: Well, that really leaves me open to talk about whatever I want to talk about, which is great.

MS. MARCUS: No, we talked --

MS. ABRAHAM: Which I'm going to do anyway.

MS. MARCUS: You lost your chance, sorry. We talked about having more than one economist in the room, and it strikes me, in particular, if you think about the 70 years of the CEA, I've only been around for some of them. And you have had more economists in more places. You have a National Economic Council that you didn't have when I first came to town; that really seems to kind of, to me, change the balance a little bit inside the White House. And maybe, I don't know quite how it alters the role of CEA, but I'd be interested in your reflections on that, as you reflect policy achievements via CEA, and maybe policy, if not failures, less than perfections?

MS. ABRAHAM: Well, let me try to reflect on that.

MS. MARCUS: It looks like it's on.

MS. ABRAHAM: It is actually on, but maybe I need to pull it closer. So, one of the things that's true about the CEA that's been noted already, is that most of the people who come to the CEA come out of academia. They come for a couple of years, and then they go back, that's not true of everyone, but most of the people who come, and it's interacting in that environment is so, so different

than anything any of us are used to.

In academia if you write a good paper, people will read it, and you'll get reaction to it, and so it's just the quality of the work and the quality of the argument that's being evaluated. I spent time elsewhere in government; I was for eight years at the Commissioner of the Bureau of Labor Statistics, which is a very hierarchical organization, and so if you came into a position in that organization, of course you were going to be listened within your realm of authority.

The CEA is not like that, which sort of gets to the question that you were asking. Within the White House, there's all these people with all of these different interests. There's, people who come into the White House who are activists, and they are there because they have a set of issues that they care about and they want to push policy forward on those issues. There's the people and the NEC, so one of the issues that I experienced with respect to CEA and CEA's ability to influence policy, was just getting to the table.

That sounds sort of -- You know, it may be surprising, but there's a set of issues where, clearly, if there are meetings going on, and people are discussing things, CEA will be invited, but there's a lot of issues where economists have important things to say that people don't necessarily think to turn to the CEA.

MS. MARCUS: So, give us an example of that.

MS. ABRAHAM: You know, education policy is an issue where our economists actually have a lot to say, but it's not necessarily a given that the CEA is going to be invited to the meetings where decisions about that are being made. Immigration is another issue where economists have a lot to say, but there is a whole another side of people in the administration who think that that's their policy.

MS. MARCUS: And so in the internal bureaucracy how do you manage getting a seat at the table?

MS. ABRAHAM: Well, I think there's a couple of things that are really important, one of course is the relationship that the Chair develops with the President, and if it's seen that the Chair has a strong relationship with the President then the CEA members and staff are going to be at the table, so that's one thing.

The other thing that I came to appreciate, and I'm looking at you, Nan Gibson, was the role of the Chief of Staff, so that the Chief of Staff of the CEA plays an extremely important role in getting to know the corresponding people in all of the other parts of the White House, and making sure that if there's a meeting being held on some topic that CEA cares about that the CEA is there, so that's another thing.

And then I guess the third thing is something that other people have touched on, it's being a good team player when you get to the table. That doesn't mean agreeing with people, it means bringing relevant evidence to the table, about the topic under consideration. It means that if somebody is proposing a policy that you think is really bad to get to a goal, a bad way to get to a goal, coming up with other ideas about better ways to try to get to get to that goal.

MS. MARCUS: So this raises the question that I want to get to, which is about the sort of odd duck that is the CEA, you've talked about the importance of being a team player, but there's also been talk about the sort of nonpartisan nature of CEA and people coming in and out of academia, and not necessarily working for the administration that they thought they were going to be working for.

So, I guess I have my first question, and I want to throw it open to everybody to chime in is, how does CEA sort of both be effective in getting that seat at the table, while managing, and so being perceived as a team player while managing that tension, especially in a world in which there is competing economic voices that are much more on the team, while managing the tension of maintaining its reputation for, I guess what we'll call in this town, some degree of objectivity, and I'm not being totally partisan, I'm trying to say this in a way that's not going to get me in trouble with any CEA Chairs in the room.

MR. BAILY: We'll, you know, one way you become a team player is by sitting next to Rahm Emanuel at White House meetings, and if he doesn't like what you said, he starts punching you on the arm, and you had better -- He's obviously changed his ways, I realize, but.

I think one way is not by lecturing, I think you -- For example, I'm a supporter of trade expansion. That's not something that everybody in administration is necessarily going to support as well. So I think just to go into meetings endlessly, and repeat the free trade mantra is something that doesn't

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win you friends, and it doesn't get you there.

Charlie Schultze, when I first went to the Council, said that the secret of the Council is that you have to find out what you think is the right economics and then try to persuade people that it's the right politics, and I don't think I was probably anywhere near as good as Charlie was at that, or some other CEA Chairs, but you do have to realize what can your audience hear, and how can you push the debate in the right direction, and I think then that's as far as you are able to go.

MS. MARCUS: Anybody else what to weigh in there?

MS. ABRAHAM: Just to add into that. In any context, the CEA can provide evidence. So, if you are talking about, for example, changes to the tax code, temporary tax credits or tax cuts to encourage job creation, the CEA can co an analysis about what way of doing that might be best, and you can present that, but you have to accept that at the end of the day that may not -- the policy that looks best from a cost benefit analysis may not be the politically most acceptable policy, and may not end up being what ends up happening.

I'm thinking, you know, almost like any economist in the room, if you were talking about how you would structure tax cuts to encourage more hiring, you probably wouldn't favor an across-the-board cut on employer taxes, you would probably favor marginal tax cuts that rewarded employees who hired more people. But we could lay that out but if that's not where it's going to go -- Let me stop there.

MS. MARCUS: Marty?

MR. FELDSTEIN: I would distinguish different kinds of policies, and I think this is like the issue of planting and weeding. Being the originator of a policy and selling it to your colleagues, that is a super hard thing to do, because what is the goal of policymakers? To have their policy accepted. So not invented here is the critical thing, and no matter how good the policy is that you bring to the table, if it's somebody else's -- if you are competing with somebody else's chosen policy you have a much harder time, so that's why I think we are probably better at shooting things down, at weeding, than at planting new things.

I think the question of how did the economists, both the chairman and the members, and the staff, get a seat at the table? At least in the Reagan administration it was pretty structured, so there

was Cabinet council for this, and a Cabinet council for that, so that if the issue was a human resources one, well there was a Cabinet council that dealt with that. So any education policy would be handled at that level, and would move up from staff to sub-Cabinet to, if necessary, if it couldn't be solved at that lower level.

And then the third thing I would comment on is that, as you've said, there were lots of economists, we didn't have, when I was there, we didn't have the NEC, but of course every department had a senior economist, but their job, they had as I said in the little piece in this publication, they had two jobs. One was to come to meetings and try to push forward good policy, and the other was to represent their department.

And there's a kind of schizophrenia in that, and of course I didn't know what they said behind closed doors to the secretary in their department but when they came, the spending departments in particular, when they came to Cabinet Council meetings, I suspected that they weren't telling us what they deep down inside, as professional economists, believed. And so in that sense the CEA, which didn't have that kind of departmental loyalty, but really only had a loyalty to the President and to "good economics" I think that gave us an advantage in winning arguments, because the people who were on the losing side of those arguments, didn't hold those views as strongly.

MS. MARCUS: I want to open it up to questions, but I sort of want to leave a thought that might permeate the questions, about whether that commitment to good economics that CEA has been able to embody. Kind of, it's survivability in an age of increasing partisanship, and I guess I'm in a particularly cynical mode, having come from the campaign trail. But I want to kind of leave that as a lingering question even as we open it to others.

MR. KROSZNER: Actually I just want to add something from a great line of Mike Mussa, who had been a Member of the Council of Economic Advisers, and he was a mentor of mine, and he was a mentor of David Wessel's, on exactly this point. He would always say that in Washington truth is just another special interest, and one that is not very well financed.

MS. MARCUS: (Laughter) Well, in the back there. Thank you.

MS. O'CONNELL: Yes. Thank you very much. You can dispel a myth, and then

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comment on how the CEA might have played this out. The myth is whether or not -- Who is the last President who had a balanced budget? And I'm thinking, I'm thinking that it was actually Richard Nixon, and the point of -- or whatever question it was. But the point of my question is, to what degree the CEA, historically has factored in deficit spending for recent wars. And there's a sense that both Iran, Iraq one, Iraq two, and then Afghanistan, were basically deficit-funded, and they led to an increase in the deficit.

So I'm wondering -- it may be a myth -- so I'm saying dispel it, but to the extent that recent wars have been debt-financed, how does that play out in the economist's analysis at your level?

MS. MARCUS: Let's try to get in a few questions, and maybe we can answer them as a whole. Another question, on that side of the room, right there?

SPEAKER: How would you advocate policy today in the presidential campaign? How would you, for example, advocate growth? What growth policies, particularly what role public investment might play?

MS. MARCUS: So, maybe we can twin those questions, deficit-financed wars, campaign policies, promoting growth. Anybody, on either of those?

MR. KROSZNER: So on deficit financing or debt financing of wars, this is another area where history can be very helpful, as we were just talking about. Another one of my mentors is at Harvard, Robert Barro, has looked at the history of financing of wars, and he would argue that it's optimal to do that, rather than to raise taxes very significantly in the short run, if your survivability is under question. What you want to do is sort of issue debt, and if you think you were going to be able to survive, then you repay it, rather than have the negative incentives of the high taxes in the short run. And so that has been a long history of that going back hundreds of years.

SPEAKER: The first war cost exactly zero, it was financed by our allies.

MS. MARCUS: Okay.

MR. BAILY: I'm not going to comment on deficit financing or the wars, I have my own views about those wars, but I'm not going to speak as an economist on those. So on the issue that's being raised about the current campaign, and you raised this earlier, I do think there's a failure of whether

-- I don't, you know, a failure of CEA. I don't know if it's a failure of economists. I don't know if it's a

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broader of the society, I think it's probably all of those.

MS. MARCUS: It's probably the press.

MR. BAILY: It's all of those. Now stay with me. The thing that we didn't do and was true even in the good years of the Clinton growth, was that the growth was much disproportionate, so even, you know, in the best years the folks at the bottom, really made a little bit of progress; in bad years or in recessions those people have gone down, and so what we -- I think we are reaping that whirlwind in the sense of this election, because the folks are not doing very well, and they'd rather move to the left or to the right. And we are seeing that in the election that you've been covering.

What do we do about that? I think this -- I don't have a good answer, and this is probably not the right place to be trying to answer that, but clearly we need to be exploring some different policies that have been tried in the past, in order to try to deal with that and the political fallout that's happening because of that.

MS. MARCUS: Another question, Alice?

MS. RIVLIN: Alice Rivlin, Brookings. This conversation has illustrated that economic policy is very fragmented in our government, and lots of governments have a finance minister who not only does finance, but he does budget, and he does the equivalent of the CEA. And when we are represented in foreign meetings, we take a whole bunch of people, and there's one finance minister across the table. Is this an advantage or a disadvantage in your experience?

MR. FELDSTEIN: So, one of the treats of being CEA's Chair, as I traveled around and I had a chance to meet finance ministers, and most of them were very articulate, very smart, very experienced and didn't understand economics. (Laughter)

So given an economics question they could give a very detailed analytic answer, but when it got to the very end, they got it wrong. And they probably had a staff economist who work for them but who was invisible. And so I think our system is really quite remarkable, in that we put a senior economist who reports directly to the President, and who is seen visibly both internationally at meetings, and also by the congress, by the public, and I think that's really a great advantage of our system.

MR. BAILY: I'd just comment that other countries are getting CEAs. I know Germany

has one, I know some other countries are doing it. So I don't think -- We may have started out as a unique institution, but I don't think we are quite as unique now.

MS. ABRAHAM: To me, it seems -- There's a lot of questions where there's considerable disagreement among economists, and I think one advantage of our current structure is that it forces those involved to really debate back and forth on what the evidence shows before moving forward on a decision, and I think that's a positive. It's in keeping with our general approach to government and wanting checks and balances, and so on.

MR. FELDSTEIN: One of the remarkable things that the CEA has done is to train large numbers of senior economists about economic policy. There's no better school for learning about the real issues and thinking about how the policy process works, but also understanding many of the technical issues involved in spending a couple of years in Washington at the CEA.

MS. MARCUS: All right, let's -- Right here.

SPEAKER: I'd like to reframe that first question about financing war, because I think -- I thought that the person that asked it was asking something different. The issue I thought was not whether you financed it by deficit or by ray detectors, but in the case of some of those wars, whether it was on-budget or off-budget.

And my sense is that -- and certainly this would have been the way when I was at the Council -- our analyses would go behind that veil. You know, the Council would not -- politically expedient to treat the things off-budget, but in doing the analysis of what the impact, and all the economy would be, we would just treat it as though it was the same as anything else. Am I wrong? Isn't there --

MR. KROSZNER: I'm not quite sure what the question was. I thought it was about the form of finance.

SPEAKER: But you are dealing with programs that are treated in different ways, in the budget, and you are trying to analyze your economic effects.

MR. KROSZNER: For sure, for sure. The budget has nothing to do with economic reality. I think we can all agree on that. And so the CEA --

MS. MARCUS: That's the quote of the day.

MR. KROSZNER: And the CEA would try to see through that, for sure.

SPEAKER: Right. And in the case of financing the wars one way or the other, the issue was what was shown in the budget document versus what wasn't shown in the documents.

MS. MARCUS: Yes. The woman right behind you; right here; you, yeah.

SPEAKER: Hi. I'd like to just follow up on that question that Alice raised. Do you think that in the three examples of crises that have been raised here, whether the advisors came together, as you mentioned the fragmentation, but to what extent do you think that there was a synthesis that really addressed the crises that you were faced with?

MR. BAILY: We should have -- The previous panel had more difficult crises than we had. I think when, towards the end of the Clinton administration where the equity market was -- had gotten higher than was sustainable, and there was a potential there, and a potential for a downturn of the economy, I think there was a lot of meeting of the minds among the people in the economic team in terms of talking to the President about that.

MS. MARCUS: Anybody else; so we can go on to additional question? Yes, this woman right here, and then on the side of the room.

MS. WHITMAN: Marina Whitman, University of Michigan. One of the peculiar characteristics of the current campaign, and I think this is true with respect to both parties, that the comments from candidates that seem to be resonating the most with the American people at the moment, makes both evidence and expertise look like negatives. And if this persists, how would a CEA function in that kind of environment?

SPEAKER: An excellent question.

MR. BAILY: With difficulty I think; with great difficulty. Hopefully, when whoever gets to be President, we'll have a slightly view, but I think you are raising in our body politik, which is the mistrust of the evidence. And to plug some of my colleagues here at Brookings, there's a lot of effort in trying to get evidence-based policies. So let's hope that is successful.

MS. MARCUS: And I guess I would just observe, as disconcerting and disappointing as this campaign is to cover, from somebody who used to spend hours on the phones with campaign

advisors, talking about economic policy and the intricacies of how much there is, health plans were going to cost, and things like that, you know, Mario Cuomo talked about campaigning in poetry and governing in prose. I think now we are campaigning maybe in excess and bombast, but we still have to govern in prose, and budgets and reality, so it's hard to imagine an actual governing White House being as unsubstantive as the campaign to get there is.

MR. BAILY: "You're fired," right?

MS. MARCUS: Yeah. And no matter who is elected. Thank you, guys, so much for a really interesting panel. (Applause)

MR. WESSEL: Thank you, all of you for that. That was fascinating. Now I'm going to turn to our final panel on current economic issues. If I can ask Ben Bernanke, Michael Boskin, Maury Obstfeld, Joe Stiglitz and Alan Murray, to come up here.

I spoke earlier about how much I learned from Members of the CEA and people with a Ph.D. in economics, but I learned a lot from Alan Murray when we worked together at The Wall Street Journal. And so I'm really glad to have him back here. I also know how good Alan is a moderator so I made sure that I moderated before him, so I wouldn't have a bad comparison.

Ben says he'll be right back. I think the remarkable thing about the people on this panel, Is that if you were listening to their accomplishments, CEA Chairman, would be only one of the incredible things on their list.

Ben Bernanke, of course, was the CEA Chairman for G.W. Bush, and later Chairman of the Federal Reserve. Michael Boskin is a Distinguished Economist at Stanford, was in the George H.W. Bush administration. Maury Obstfeld, who was in the Obama CEA, is now Chief Economist at the International Monetary Fund. And Joe Stiglitz, who was CEA Chairman in the Clinton administration, also won a Nobel Prize.

So it's really a testimony to the incredible strength of the institution that the people who have led it over the years have been as distinguished as these four men. Alan?

MR. MURRAY: David, thank you; and hats off to you for putting together a truly remarkable event. It did occur to me sitting here for the last couple of hours, that this incredibly

distinguished group of economists is much more entertaining and insightful talking about history, than I ever remember it being talking about the problems of the present moment. There may be an explanation for that, I don't know, but now this panel is going --

MR. BOSKIN: You weren't exactly long on jokes, either Alan. (Laughter)

MR. MURRAY: Now this panel is turning to current problems, and I guess I get to play the President here. I have their five big mysteries about the current economy that I'm hoping this very distinguished group, coming from very different perspectives, can answer for me. And I hope we have time to get through them all, and we'll time for a couple of guestions.

But let me start with the first. And that's the fact that I spend my days talking to business leaders who tell me that technology -- technological change is happening faster than it ever has in their business. It doesn't matter what business they are in, and that if you put together sort of mobile computing, the cloud, inexpensive sensors they can put on everything and collect massive amounts of data that they can analyze, and artificial intelligence, and advanced robotics, and nanobots, that you have something going on that -- called Schwab, that others call the Fourth Industrial Revolution.

And so I'm told day after day how amazing this is, and if you look at the productivity numbers there's nothing there. It's not happening, the productivity numbers aren't growing. So mystery one is, the productivity mystery. Why is it that we have all this talk about the rapid pace of technological change, and yet in the productivity numbers we see nothing? And of course productivity ultimately drives economic growth, and living standards, and all the other things we care about. And Michael Boskin, since you were giving me a hard time, you have to go first.

MR. BOSKIN: Well, first of all, I think it's important to remember for most of history it took a long time for technological inventions that would eventually do substantial -- be substantially responsible for increase in productivity to disseminate through the economy. It took half-a-century for half the factories to be electrified.

And one of the greatest economists of the 20<sup>th</sup> Century, Bob Solow said, we see computers and IT everywhere, showing up everywhere, but the productivity just (inaudible), but it eventually it did.

So, the past isn't necessarily prolonged, but it may be that part of what's going on is the combination of demand factors and a sluggish global economy, a variety of other -- a variety of other institutions, being at the pace of some diffusion. It's slow. It's also important to recognize that a lot of what becomes really important commercially isn't the first thing, or let alone the main thing, an inventor, or the firm that rolled it out was trying to accomplish.

Marconi's wireless transition was to compete with the telegraph, he never envisioned in mass broadcast radio. Edison's most famous invention, most original invention was the phonograph, and he sued to prevent it from being used for music. So, you've got to be a little careful about those things. That being said, I think that there's been a barrage of criticisms of the productivity data, that there's a lot of measurement error and that --

MR. MURRAY: Michael, they are having trouble in the back, if you can --

MR. BOSKIN: Okay. And Bob Gordon, in his book for example, is overstating the degree of slowdown. I've taken a pretty close look at that, and I think that that accounts for a very small part. So I think we've definitely been on a productivity growth slowdown, and I will say that the most important thing to remember, in my opinion, is if we stay initiative a productivity slowdown, it will become even more important to develop policies which are more conducive to productivity growth.

MR. MURRAY: So at the end of day are you an optimist or optimist or a pessimist about—

MR. BOSKIN: I'm a cautious optimist. Not like all my friends in Silicon Valley, around Stanford, who are wildly enthusiastic about the latest this or that. But I do believe if you look at the fundamental science of what's going on, and it tends to lie behind all this stuff, which was mostly chemicals in the late 19<sup>th</sup> or early 20<sup>th</sup> Century in physics, I think we are, first of all, we are turning, in part, to biology and a lot of the improvements we are going to have are things that will valuable and are going to be very important, but it will be dealing with an aging population around health, and those are going to be things, which are going to be devilishly difficult to measure. So, I think that's one thing. And also the technology makes it harder and harder to figure out ways to actually measure what's going on, (inaudible) just given away free, for example.

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MR. MURRAY: Anybody, do you want to take a different stab at that before we move on to mystery number two?

MR. BOSKIN: Can I just finish with one last comment. On the basic science, we've heard a lot about these things are drying up, first it was oil, well, we are kind of now on a huge oil glut, so fracking before that 3D seismic imaging would (inaudible), which only became valuable when prices got high enough to make them valuable in the short run by using those technologies.

And more recently we've heard that Moore's Law was running out of that every 18 months or 2 years, doubling of the capacity of chips would eventually slow, and that would be a limiting factor, but we've now turned to 3D chips, yes they are more expensive but nothing proportional -- but not in proportion to the increase in power. And also when talk to the people in the software side of this in academia, particularly at Stanford, they say that the hardware side was moving so rapidly that they didn't have to spend a lot of time developing really advanced methods, software methods to handle multiple chips.

But then it's certainly conceptually doable, it will hard, but that will be the next frontier and they think they can tackle it. Now, again, I've also learned to take scientific and engineering researchers to be among the most optimistic about their own research of anybody I've ever met, so it will probably take longer. But I do believe we have an opportunity to have much higher productivity growth than we've had recently and to support a policy environment, I'm more cautiously optimistic than Bob Gordon or Larry Summers.

MR. STIGLITZ: Okay. Let me just say a few words. I mean, obviously there has to have been a productivity slowdown after I was at the CEA chair, so that goes without saying, and I guess you were agreeing about good policy. And a very exciting announcement today abut gravity waves, nobody quite sure where are the practical applications will be, but clearly it's going to change our lives. But that speaks a little bit to the disjunction between business people's view of what's happening, and an economist's view.

So, if you are making a lot of money from Google or Twitter, they are great advertising engines, but the question is -- And they have the value of social media; I don't want to underestimate that,

and it does improve the quality of life, but the question is, a lot of their income, and they are getting a lot of profits, it's just profits that are shifted away from conventional media.

So you can't -- You know, they are rightly enthusiastic and so would I be, if I were becoming a multi-billionaire overnight, but you can't confuse that ability to become a multi-billionaire with the net increase in the productivity of our economy. And so -- Let me stop there.

MR. MURRAY: And we'll come back to inequality, but you are -- it sounds like you are cautious pessimist where Michael is --

MR. STIGLITZ: I guess I'd say I'm a cautious pessimist, that's right. I find Bob Gordon's argument that there's nothing as important as electricity, somewhat convincing.

MR. MURRAY: All right. Let's move on to the second mystery, and Ben Bernanke, this one is for you. And the mystery is inflation. We now have unemployment -- well we are now at what used to be considered full employment, and yet there is no sign of inflation, there is no sign of the expectation of inflation in the financial markets. And I'm sort of wondering. Actually I had the great honor at the London School Economics, of being there when Janet Yellen was on sabbatical, and she taught my macro course.

So I have seared in my memory the vision of her drawing the Philips curve up on the blackboard. I told Alan Greenspan that when she was first appointed to the Fed. And he said that's the worst thing I've heard about her yet. (Laughter) But the question is where is the Phillips curve, and what are we supposed to think about this inflation that keeps coming but does never arrive?

MR. BERNANKE: Well, if I had to talk in a theoretical way in Janet's class, I think the Phillips curve is probably still the best general framework for thinking about inflation. The problem is using it in a practical way to forecast inflation, and obviously people have talked about, for example, the key concepts of the NAIRU or the natural rate. There's a lot of disagreement right now about whether we are at full employment or whether other indicators, other than the U3 unemployment rate, are better measures of demand of labor slack, for example.

I think one area where the economists really have not done a good job is explaining inflation expectations, so the key -- the only thing in the Phillips curve, essentially the only thing that ANDERSON COURT REPORTING

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determines inflation over the long run is inflation that is expected. So it's kind of circular. With rational expectations you have all kinds of technical issues about signing the equilibrium and so on.

More realistically we believe there's various kinds of learning and adaptation going on but, you know, right now, I think a lot of debate is tied to the question of whether inflation expectations are in fact anchored close to 2 percent, in which case, then the Fed is right, that is the effects of oil prices and so on work through the system, we'll begin to see, moving towards 2 percent. Or are inflation expectations somehow at least partly unanchored? I think those are the kinds of practical questions that make the Phillips curve an imperfect framework.

MR. MURRAY: And the answer to that question is?

MR. BERNANKE: Which one?

MR. MURRAY: Which of those is it?

MR. BERNANKE: I don't know. If I knew I would certainly tell you.

MR. MURRAY: Did you say you would certainly not tell me or you --

MR. BERNANKE: No. No. I'm a believer in truth. I would, certainly.

MR. MURRAY: Maurice?

MR. OBSTFELD: Well, your question, the way I heard it was implicitly about the United States, so I would just want to signal that if you look globally, and I'm not talking about Venezuela, but if you look at, you know, their having -- not having a deflation problem, they are having other problems. But if you look globally, especially across advanced economies, but also at the number of countries in Asia, including China, you see very strong deflationary forces, stronger, I think, than in the United States, which might suggest that in some countries, the anchoring of inflation expectations is pretty weak.

One great example is Sweden which just lowered their central bank deposit rate to minus-50 basis points. The economy has been growing at 3.5 percent in real terms, inflation is about zero, and they are completely panicked about reaching their inflation target which is not the same as ours. They've been talking about foreign exchange intervention, and all kinds of ways of doing things.

So, you know, is the Phillips curve dead? Well, clearly there's something in that expectations term that is not working. In Europe the outlook is weaker than here, in Japan the outlook is

weaker than here, and it is a broad problem.

MR. MURRAY: So, do you --

MR. BOSKIN: Just one second.

MR. MURRAY: Yes. Go ahead.

MR. BOSKIN: More generally I don't think it's possible in today's economy in recent years, to understand the American economy just by looking at American economics and statistics; they have to be understood as conditional now with what's going on in the rest of the world.

MR. MURRAY: Okay. Joe, do you want in on this one?

MR. STIGLITZ: Well, I think as part of the issue here is related to the issue of inequality. As Ben said, the unemployment rate doesn't necessarily mean the same thing that we thought it meant, and particularly in a period where labor force participation rate is very low. The employment rate is low, that you have to ask what is going on, and part of it is that there are large numbers of people who have become discouraged workers. There are large numbers of people who are employed, but only part time, involuntarily, and all that gives a different context to what you mean by unemployment. So there's not a surprise that given that --

The different is in the real economy, and I guess I would stress the differences in the real economy is driving the differences in behavior. And of course differences in the real economy may affect inflationary expectations. But I think we are now to focus on what is happening in the real economy and how that is feeding into some of the other problems that we'll be talking about.

MR. MURRAY: And we will come back to that, I promise. Okay. Mystery number three, and Michael Boskin, I'm going to make you take this one because you sit on the board of Exxon Mobil, and that's oil. We used to think that falling price created -- was a great thing for consumers. Now, and again, this maybe a U.S.-focus view, now we aren't so sure. Maybe globally it's a wash, but how much should we be worried about what's happening with oil prices?

MR. BOSKIN: The economists' traditional view is it depends whether it's a supply shock, or a demand shock, and it's obviously, it's been both, but the fact of the matter is, we've had an immense increase in oil production capacity, and there's still more about to come on. So, in the U.S., for example,

out of 4 million barrels a day, net, of the natural fuel requirements since 2007, so that's just an immense increase, and there were similar increases in some other places. And with the sanctions lifted the Iranians will be coming back on at some point. So there's a big supply component to this.

On the effect on the American economy, I think people substantially overestimated how much we would lose to consumption if we did, and substantially underappreciated the tremendous effect it would be on American energy production investment and employment, because that was probably in the sector, it's the single-most robust in a weak recovery. And then in addition of course you have the appreciation of the dollar, so I wrote in your former newspaper 10 months ago, that the net effect would be quite small.

MR. STIGLITZ: Can I just make one more comment, which is that whenever there are large changes in relative prices, even if we were oil neutral, it has large distributive consequences, and in the short run the adverse effects on the losers are greater than the positive effects on the winners, simply because there are asymmetries in adjustment times.

So, we saw this back in the '70s when the oil price went up it was bad for economy, then in the '80s when the oil price went down, we also had a little bit of a bad patch, and that just speaks to the fact that adjustments are costly.

MR. MURRAY: Maurice, do you want to put -- Oh, sorry, Ben, go ahead.

MR. BERNANKE: Well, I was just going to add, that relative to the 70s our financial markets are much more globally integrated than they were before, and a lot of our perception is coming from the fact that markets are so responsive to oil prices. That the world, as a whole, of course, producer is equal to consumers, and so there are losers and there are winners, but people are reacting first to the signs that oil price declines are suggesting slower demand growth globally, that's one possibility.

Another possibility is that there are financial stresses being created in various places, and with globally integrated financial markets with risk-sharing around the world, even though what's happening might be happening in Russia, or in Brazil, we still feel that in our markets here.

MR. MURRAY: Maurice, do you want to put it in a global context?

MR. OBSTFELD: Yes. I'll add a CEA story. So, somewhere early in 2015, we had our

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morning staff meeting, and Dennis McDonough, the chief of staff, the CEA has been saying this is going to be a plus for the American economy, it's going to be a good thing, and one of the things Dennis had noticed was that whenever the price of oil went down the stock market dropped. That's an exaggeration, but it's become less of an exaggeration the last few weeks.

And so he said, well, why is that, if it's such a great thing? So, I wrote a memo on the six reasons why that would happen. You know, and it's been somewhat surprising to me how much stronger the correlation has become from when I wrote that memo. And it's really puzzling, because if you look back on the '80s we had this whole macro literature about oil shocks and the idea was they led to stagflation, because they would raise production costs, and they would also increase inflation. And how is monetary policy supposed to respond?

So, what we've been seeing when they fall is that we get the deflation, but we haven't been seeing the benefit from lower costs of production really. One reason for that may have to something with being at the zero lower bound, that this is like a productivity increase, and it's deflationary, and if you are at the zero lower bound, and you can't use monetary policy, it may make -- it's harder to stabilize the economy and people in the markets know that.

You know, globally, there hasn't been a payoff either because we have a lot of stressed economies. Saudi Arabia, as the price has dropped and stayed low, which is partly of their doing, has cut their government deficit from 22 percent to 15 percent, but that's a big fiscal contraction.

So, why is the effect so bad? Partially I think it's because it comes at a time when a lot of commodity exporters are under pressure, and the oil story is not mainly a China story, I think the other stories are mainly a China story, but this is hitting a wide range of emerging market commodity exporters, oil and non-oil, in a way that's really deflationary.

MR. MURRAY: So, you've already hit on my fourth mystery, which is China, and how worried should we be about it. On the one hand, you'll sometimes hear economists say; look our exports to China are only, what, 1 percent of GDP, not that big a deal.

On the other hand, I think the extreme case was a letter that Kyle Bass, who is not an economist, I understand that, but put out to his investors yesterday saying that this is four times worse

than the financial crisis of 2008, 2009, and it's going to require the Chinese to pour massive amounts of money to recapitalize their banking system, and we'll have a greater than 30 percent decline in the value of the Chinese currency against the dollar with huge, global consequences.

So, that's an extreme view obviously, but Ben Bernanke, how big a deal is it? How worried should we be about what's happening on the other side of the globe?

MR. BERNANKE: Well, it's a little bit, frankly, a little puzzling. We knew that China was going to slow down, it had to slow down. It's changing its growth model from one based on heavy industry in exports to one based more on services. We know it's no longer growing because of farmers coming to the city. There's all kinds of things that mean that China has to slow down, moreover that the outward-facing part of China, the part that imports commodities and trades industrial goods, that is slowing even faster than the economy as a whole.

So all of that in some sense is not terribly surprising, but it's similar in ways to the oil issue, in the sense that, while it is true that the U.S. is not directly exposed that much to trade in China, there are other countries in the world that are more exposed, including Europe, I think, more than we are. And those financial pressures are somewhat asymmetric, as Joe was suggesting.

You know, it is possible that they'll have to take strong measures to deal with some of the credit issues for example. The good news is two things, one is that the Chinese government has huge amounts of resources, and showing a willingness to use them when it's necessary to address, for example, banking problems.

The second thing is that unlike a lot of other emerging markets, that China's debt is mostly in the domestic currency, and funded by domestic savers, and so that that currency mismatched risk that we say, for example, in the Asia financial crisis is not as pronounced, I think, in China.

MR. MURRAY: Maurice, you wanted to comment?

MR. OBSTFELD: Yes. I broadly agree with Ben's analysis. You know, I think where the dangers are greatest is in the spillovers to emerging market commodity producers. And those that, you know, sell machinery to China. You know the sector that is shrinking. China consumes, you know, 50 to 60 percent of the world's supply of certain metals. You know, you look at copper, you look at iron ore,

and so this has been an immense impact on the rest of the world.

And it's something that really goes back I think to the early 2000s that, you know, China's rapid growth, its emergence on the world scene created a terrific demand for commodities, and during this period, you know, investment flowed to emerging markets who invested very heavily in these sectors, they grew quickly, China's stabilization after the global financial crisis perpetuated this trend.

And when that came to an end around 2011, suddenly you have a lot of emerging markets with a lot of capacity, and a lot of debt, whose growth model was suddenly not looking so good. And for them the problem of adjustment to this, of diversifying their export bases is going to be a challenge they have to deal with for many years going forward.

MR. BOSKIN: I'd like to make one quick comment or perspective and then give part of an answer. We are celebrating the 70<sup>th</sup> Anniversary of the Council of Economic Advisers, we've done this halfway along at the 35<sup>th</sup>, which would have been 1980, 1981, it's almost inconceivable, that anybody would be talking about China.

Dun Cha-Ping had just started his reforms, and if someone -- if one of us, one of our predecessors had been up here saying, I predict at the 70<sup>th</sup>, that 400 million people are going to be lifted out of abject poverty, and our financial markets and our multinational businesses would be deeply concerned about a slowdown in China, you would have made some very catty comments about, well, you know, they must be off their meds of something.

MR. STIGLITZ: Just let me make just a couple comments. First, you know, I think the point that Ben made was important that most of what is going on, there is no news. We knew there was going to be a transformation, a movement to a domestic-demand-driven service-based economy, so I think this is again testimony to the myopia and shortsightedness of financial markets that we see over and over again. That somehow even though they know about it, they've been told about it, when it happens they are surprised.

There are a couple of things that are -- I think that aren't genuinely surprised. Two things, one is I don't think most people expected the magnitude of the monthly capital outflows out of China. You know, like last month, \$100 billion dollars, those are big numbers and even though that

looked like they had a lot of reserves, if you are burning it out that fast, at least that's something that draws your attention. The second thing is, I think there is a little bit of worry about the economic management, they've gone from a small economy, I think, Mike was absolutely right, my first trip was exactly 35 years ago, and you went there, and it's very different in -- Who would have predicted that they would be where they are today, and it is a real miracle.

And you might say they somehow solved a lot of economic problems on the way, including moving 4, 5 million people out of poverty. But as they've gotten a more -- a larger and more complicated economy it becomes more challenging managing it; and I think that at this juncture there are some people -- there is in some quarters a lack of confidence in their ability to make those management. And that may be the news that has really struck people.

MR. BOSKIN: And I want to just make sure we understand it's not just the financial markets that are overreacting or having this big effect, but you have lots of multinationals in the United States and Europe and elsewhere that re prominent traders in China that had been expanding capacity as the oil industry expanded capacity, partly in relation to this, so those are real effects. The unemployment and the oil patch, the downturn, the lost profits and so on, those are real effects, so it's not just people trading oil futures.

MR. STIGLITZ: No, but they should have expected some of this, because that was really the point.

MR. BOSKIN: Yes. Sure, I think most of them did, but it just suggests a naïve extrapolation of very growth rates for very ladies and gentlemen gets you in trouble, whether that's extrapolating China's growth, or extrapolating the growth of the U.S. economy in 2005, '06 and '07 to continue -- and housing prices to keep going up.

MR. MURRAY: Okay. Fifth mystery, which Joe has already referred to a couple of times, and let me I saved it for last, not because it deserves to be last, but because I was afraid it would be the most controversial, and that is the question of inequality. Why is it getting worse, and what from a government policy perspective, could reasonably be done to have any effect on it? And Joe, you can take this on first?

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MR. STIGLITZ: Okay. Well, you know, in the discussion in the earlier panels, there was a broad discussion about how mostly the economists agree, but this is one area where I think there are a number of different theories and I think economists disagree. One of the things that we did in, I think my last or next to last CEA report, is discussing inequality which is already beginning to grow and discuss some of the forces that we are going into it, and there wasn't clarity then.

So let me just discuss three alternative theories very quickly, and give my view, and they all play a role, the question is parsing out the relative importance. One of them is obviously there are some you might conventional demand and supply, relative supplies of skilled and unskilled labor. That's part of what is going skill by technical changes. For the most part, those theories have become either discredited or a lot less emphasis placed on them in the last 10 years.

One of the reasons for that is the mystery of how it is over the last 35 years, or so, productivity has roughly doubled, and wages adjusted for inflation and has roughly stagnated. And so that is a big gap, and 20 years ago, it was just beginning, we were aware of it, but it just continued and grew and grew, and so that suggested something else is going on, and I think it has been a whole set of factors that affect the bargaining power of workers, the rewriting of the rules of the market economy that have allowed more scope for market power; some intrinsic changes in the structure of the economy that have led to more market power. More market power means markups are higher and therefore real wages go down getting a smaller share of GDP, so I think those are two of the factors.

Third, Piketty, the one that Piketty emphasizes is more differential savings rates about different groups in the population. I don't think either the differences -- I don't think you can explain, for instance the gap between productivity and wages in Piketty's explanation, and the savings implication s of Piketty's model can't explain the decrease in the capital output ratio, occurring simultaneously with an increase in the wealth income ratio. And that disparity is a sign of the growth of ranks in our economy, and that is more consistent with the theory that I think is responsibility for the growth of inequality.

MR. MURRAY: Michael?

MR. BOSKIN: Well, just a few quick comments, I do agree that the conventional measures of inequality have widened, but I think the single-most important thing to note is they've

widened almost everywhere. So it's very hard to pin a lot on what's happening in the United States.

(Inaudible) of the Bush tax cuts and Obamacare but neither were the primary reasons why inequality has changed much in the -- you couldn't say more than a small part of inequality, if any. The most --

MR. MURRAY: So why --

MR. BOSKIN: Let me just go on. So, the labor share of income has declined almost everywhere. Another economic supposed constant because we used to like showing -- doing examples of Cobb-Douglas to our students because they are easy to solve. That was true until it wasn't, like the saving rate constant and the ratio of female to male wages, and other supposed laws. So I think it's important to understand that. I think it's also -- and to just tie the package together, it's also important to understand that global inequality has plummeted. Absolutely plummeted, and that's because a tremendous increase in, or the numbers of people moving out of poverty in the developing world, China most, especially.

MR. STIGLITZ: Thank you. The Gini Coefficient of the world has not really plummeted -- MR. BOSKIN: It's fallen by more than the U.S. has increased.

MR. STIGLITZ: Depending on how you measure it. I mean I believe --

MR. BOSKIN: Okay. We'll talk offline about that. Okay. We'll talk offline. I'm sure you have a measure that you think supports what you are saying. So, I'll concede that, if I won't concede that I would agree with the measure. In any event, so the main thing that's been going on, has been something in common with all these economies, and that's primarily the combination of technology and globalization, and that is (inaudible), and also combined with, what Joe kind of dismissed, that technical change has been increasingly skilled bias, something that Laurie Lau and I find in our research which we call, that technology has been both capital and human capital augmenting, which we call Generalized Solow-Neutral Technical Change.

So I think that has to be the primary explanation. There are many other things, I'm not saying there's been -- no things that Joe mentioned that I wouldn't give at least some role to, but I think the primary factor has to be something that's common globally.

MR. MURRAY: And Michael, if it is technology and globalization what, if anything, can

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you do about it?

MR. BOSKIN: Well some of this, and more -- my wife speaks this more, I mean, we've known for 50 years the economists -- the Factor-Price Equalization Theorem, and so on, with other people coming up, and wages growing there, so that when you added the billion workers capable of producing traded goods in the global economy, when you open up China to a less extent, from not as far back, India and Eastern Europe, that was going to put downward pressure on wages in the advanced economies, and the people that are going to be hit the most, are the people with the least skills.

But what can we do about it? I think by the way, I do not think that inequality is the main problem, I think the lack of growth of income for most people over an extended period of time, for a lot of people the slow growth of income over a period of time is the main problem. Now, when I think of inequality I distinguish three concerns that people have about the people at the bottom, poverty primarily. Concentration at the top, which one of the candidates seems to have nothing else to talk about than that, and mobility, and my new colleague, Raj Chetty, study has shown that mobility has not lessened in the United States.

So these are issues they are -- and I'm not suggesting how unimportant they are, but I think we have to take a serious look and understand them, and get away from a lot of those sloganeering that's out there in the real world, to have effective solutions. I think the most important -- the three most important things to do, are to have an economy that grows more rapidly. We can talk about policies do that; but that would disproportionately benefit the people who disproportionately suffer when it doesn't grow rapidly, which is people at the bottom.

Secondly, I think we have to work, and this will only pay off over a span of time. Greatly improve education outcomes and just skilled generation outcomes, that's everything from improving trade training and community colleges to all across the spectrum, improving our K-12 education, I think our higher education is doing a pretty good job. If you look at OECD statistics on educational tests, we all know there are problems with test scores, but we are considerably below the OECD average and the mean, we are considerably above it in the low performers, and we are considerably behind it in the top performers. So that's -- maybe that will be the next crisis if we don't do something about that soon.

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And then the third I think is, we need policies that wind up enabling people to transition out of dependency into the workforce. I think in a genuine attempt to cushion harm, and something that I support expanding in a downturn, or when times are tough; we need a better way to transition people off that, and reduce the work disincentives in our transfer payment system, so we can get on to an economic ladder and then get up it.

The CBO estimates that in the phase-out ranges of several transfer payment programs that many people are on simultaneously, they are paying tax rates of 100 percent, that's double our marginal tax rate, and I include California taxes and federal taxes.

MR. MURRAY: Maury, you wanted in on this?

MR. OBSTFELD: Just briefly. I sort of partially agree with both previous speakers, maybe not completely. You know, the global nature of the inequality problem is very striking and Mike brought that out but, you know, while there has been convergence in per capita incomes, from poor to rich, and a lot of people come out of poverty, you look at a lot of emerging and developing countries and you see increases in inequality, and China is a leading example. And you even see it in Japan among advanced economies, which has long been pretty egalitarian.

So, it is a huge track level trend. I think it's related to, you know, the fact -- I think it is partially about rents, that people with the kind of skills you need to succeed in this globalized economy, the elites are extremely mobile, they can move from country to country, but others are left behind, and when growth starts to slow, the tensions become very strong, and that's one of the reasons that Chinese leadership is so attached to growth targets.

They don't want growth to slow, because even though many people are in China are less poor than they were, the disparities are great. And so it's important to keep growth up, it's important to have an anticorruption campaign, you know, all of those things fit together. We see this very much in Europe, where the whole European project is contingent on the elites being able to move from Brussels to London to Frankfurt, wherever throughout the EU, that many others are at home, immobilized, not having work, being left behind.

So it is a challenge to make, you know, a borderless European Union work, globalization

work, it's not going to work politically without policy, some of which Mike mentioned. You know, education, job training and worrying about those who benefit relatively less from globalization.

MR. MURRAY: Ben do you want to add anything, or do you want to keep your powder dry?

MR. BERNANKE: Just to say these are very tectonic forces, globalization technology institutions which are very hard to deflect. And there are also multi in causes, so we need lots of different things to try to ameliorate without solving the problem. There is some chance, and I guess we can't continue the discussion of this, but there is some change that some of these forces will sort of naturally be mitigated.

For example, we could only have one integration, it was said before, I think that only one time will we have China being integrated into the global economy, when that integration is more complete maybe, you know, some of these forces will subside.

MR. MURRAY: A couple of -- Can I take one or two quick, very quick questions? Way in the back, is there a microphone there? Yes, perfect.

SPEAKER: I'm sure you are all aware of the recent volatility now in the markets. I wanted to understand, to what extent, if any, do the markets have when the CEA are making decisions? I mean, do the markets have any influence when the CEA is making decisions? Ben, I'd like your perspectives specifically since you had experience with the Fed and also was involved in CEA.

MR. BERNANKE: Well, what you -- there's a couple of possibilities which would make you pay attention to the markets. One, of course if you understand why the markets are behaving the way they are behaving, and you take that into account, but the two other possibilities, one is that the markets know something you don't know, in which case, you need to try to understand it and perhaps, you know, as the Fed did in September, you know, it takes some time to try to understand it.

Alternatively, maybe the markets are just being driven by sentiments to some other ephemeral forces, but even in that case you need to pay some attention because that affects -- the markets themselves can have independent effects on behavior and therefore on the real economy. And so, yeah, I paid more attention to markets when I was in the Fed than at the CEA, but I always paid

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attention to that. Yes.

MR. STIGLITZ: Let me just mention one brief episode, which was, at one point the value of the dollar relative to the yen starting plummeting. And there was no explanation for what was going on that we could figure out, but we became preoccupied by it, but I don't think, every once in a while, Bob Rubin would make a speech about believing in a strong dollar, and we would try to explain, you know, we felt uncomfortable that making a speech was going to change the world, but he seemed to enjoy it, and so that's -- You know, we were talking before the difference between finance ministers and CEA, and --Anyway, I'll stop there.

MR. MURRAY: One last question.

MR. BOSKIN: Can I just give a quick CEA story about this?

MR. MURRAY: Yes. Go ahead.

MR. BOSKIN: Okay. A very quick one; it's very important to figure out to the extent you can, and then have an even more traumatic time, and a more -- bigger change and a different set or responsibilities as Fed Chairman. It's very important to try to figure out what is temporary and what is permanent. What is a liquidity problem versus a solvency problem, and what's going to affect some other part of the economy, I think as earlier mentioned by Alan Krueger, or I think by Alan, about the auto industry, and so on.

So that's really important, and it's not easy to do in real time, and you are making decisions in real time. And as someone said on one of the earlier panels, it's a lot to do that, five years later writing a paper as an economists back in your university. So we had, when I was CEA Chairman, and people seem to have forgotten the last set of financial crises, which is maybe about a third as large. It was the savings and loans, and the third world; they had the money in central banks all over the world, mark-to-market insolvent at the time, because of the repudiation of their Latin debt.

And we did the RTC and Brady Bonds. So we were in the middle of doing all this stuff, and Drexel Burnham was having trouble. And Drexel Burnham, I remember, the first to duties high yield bonds, pejorative called junk bonds, but help finance some pretty impressive things that turned out really well. And they were having trouble, and there was a lot of concerns about whether this would spread to

the whole high yield market into to the whole bond market.

And perhaps not surprisingly, the President was getting phone calls from longtime supporters who had been financed in building industries with high yield bonds, and they were wondering what the hell was going on. And so we had the staff of the CEA, and Alan Greenspan was then Fed Chairman, his staff was doing stuff, and the SEC was doing stuff. And finally Alan and Richard Reid and I got together, getting rid of the staffs, and we just couldn't convince ourselves if there was anything systemic, and so we let it go.

And the President agreed that was the right thing to do. But obviously it's a very tough call to make even when it's one particular institution and you are not aware of a bunch of other ones, that they have analogous problems because they are highly leveraged or something. So it's really important to pay attention to the markets. It's also important to recall without overanalyzing Paul Samuelson's famous quip that the stock market caused a pretty good line the last (inaudible) sessions. So you need to be a little bit careful about the incoming and what you -- you try to understand the signal and what's noise.

MR. MURRAY: So I can't figure out which of you had your hand up first, so very quickly let's take both questions, and then we'll wrap it up.

SPEAKER: I thought I'd come back to the question of, where is CEA going in the future? And I'm thinking about the challenge of one, there's more volatility, some things are moving much faster. And it's the yin and yang between the politicians who need quick results, versus the economies who look at -- the economists who look at data and try to have a long-term sense of it, and we are looking at the "but" problem. Here's all the issues but this, there's this monster in the room, and one of those buts can be population growth which is really declining, but could understand the whole growth models. And I don't think we are talking about those.

MR. MURRAY: Let's get the other question.

SPEAKER: My question is really about, I'm wondering whether the CEA should think about the access to information that the consumer has when he or she makes his consumption decision. So, if I go into a Walmart and I want to buy a classic (inaudible), I have two choices. One that might be made overseas, that's a dollar cheaper than one that's made probably in the United States as a dollar

more expensive. If I trace that dollar difference I might find that in some countries overseas, an 11-yearold was pulled out of his school, put in a factory filled asbestos, which means he's going to get cancer. Intellectual property was stolen from the West in order to produce that good. Dirty coal is burnt in order for the goods come out that sort of thing.

SPEAKER: And I think (crosstalk) --

SPEAKER: So there's externality, the same thing in the United States, someone is going to lose their job; they happen to be living next door to me so their house now goes into disrepair, et cetera. So right now I go into a store, and I have, potentially, exactly the opposite information, and I make the purchase decision and that's repeated 66 percent of the global GDP or certainly in the U.S., is based on that decision. So should we care about that? Should we find a way to have at least first or second-order impacts embedded in that price? Should the CEA be providing that? Should be available for me for me on a map, or should Walmart be responsible?

MR. MURRAY: Okay. Who wants to take on one or both of those questions?

MR. STIGLITZ: I can take on the second question. Okay. I think there are -- this is really a very deep and important issue on trade and trade theory, which is, should trade agreements restrict disclosure of information, and is the disclosure of information unfair trade provisions? So, for instance the question -- the USDR -- let's talk about it in different context. The USDR has had the position, I think, in general, that disclosing information about GMO on vegetable and grains, is a trade restriction. It distorts trade, whereas a lot of people in Europe feel it's a basic right to know whether --

MR. MURRAY: Vermont, too.

MR. STIGLITZ: And Vermont. So that's an example. So the United States, for us the WTO case where -- just recently where the question about whether we could label meat as coming from a particular place. And the WTO ruled that we could not label meat, because it was implicitly directing people. I think these will -- I'm more on the side of it's important to disclose any information that consumers care about, and that is more important than the strictures of trade, but it is an extraordinary controversial issue.

MR. MURRAY: And I think that sorts of gets to the first question, which is, what becomes

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Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190 of the CEA in an era of transparency and vast new amounts of data. What does the future of the CEA look like? I don't know who wants to take that on.

MR. BOSKIN: I'll make couple of comments. I don't think it's been exactly slow in my tenure, my friends before me, Alan, Marty, and others, Charlie, and people who have come have come after. Maybe it's speeding up, there's a lot of global misinformation, there's information, and I would say stuff is available in real time in tremendous abundance, and a small fraction of it is actually information. But I think that a big issue that the CEA has had to grapple with, since its inception, is the a distinction between the short and long run, because politicians tend to live, primarily, in the short run, they've got to get elected, they've got to get a vote next week in Congress to do something.

They are trying to get a Supreme Court Judge confirmed, and they are trading something to get a vote, et cetera, they don't have the luxury always of thinking about what's going to happen in the next 20 years. I work for a President who often actually went out of his way to look at the longer terms and often at his own -- knowing it would be in his own political cost. I'm sure others work for people who -- presidents who felt they did the same.

But the point is that it's much harder to get something -- get people interested in the administration, and especially on Capitol Hill, in the Congress, and something that's going to roll out a lot of benefits down the road, and to avoid being worried about something that's going to impose a lot of costs way down the road, because of their myopic evaluation of costs and benefits.

And, you know, many people say it's the length of time between now and the next election. For most people, I would add to that in my dealings with Congress over the years, it's also anything out of the jurisdiction of their committee or sub-committee is considered not germane. And I think that's a really important thing, because in economics most of our theories, some try to make a distinction, most of our theories try to figure out how to relate the short to the long run, obviously the long run is the unfolding of the short run compounded over time.

So I think that's really important, that distinction also is a big part of the disagreement about some fundamental things, like the efficacy of short-run fiscal stabilization, or things of that sort. So I think the CEA will always have a role to play in trying to bring that perspective. I think it's one of the few

places in the government that does that, sometimes with the assistance of other agencies.

But I also think that the CEA is just going to have to adapt to the changing world, and I see no reason to expect it not to be able to adapt as other institution may be able to. Our successors will have grown up in a world where they've been using social media since the age of 1, et cetera, et cetera, et cetera.

MR. MURRAY: Joe, let's see what you do with 60 seconds.

MR. STIGLITZ: Okay. Three points in the 60 seconds, first --

SPEAKER: You only have 20 seconds for each.

MR. STIGLITZ: First, I just want to want to second one of the points that Mike made.

cash versus accrual accounting. One of the big things in that we are accounting under -- you know, in the

One of the things that, in clarifying short run versus long run is for instance the accounting question of

Iraq war, was that we didn't do a very good job of accounting for the cost that we were going to be

accruing; the \$1 trillion that we are going to have to spend just on disabilities of that war. So that's an

amazing number.

Second point, that one of the roles that the CEA can play, is always -- is clarifying tradeoffs, and even if -- and this is sort of where you are almost nonpartisan that you want to know what are the tradeoffs, and what are the uncertainties about the tradeoffs, and why there are these uncertainties in the tradeoffs. Because I always felt, you know, if the president -- the president is going hear all the different sides, and he is going to want to know why there are these different views. So I think

that's a very important role for the president, just the role of education.

The third, just to pick up a point that Alan Greenspan made in his first remark, he was talking about the difficulty of getting accurate data. One of the things that is going on, you know, the big data is, there are people who claim that they can get moment-by-moment readings of GDP by scraping the Internet, and that those minute-by-minute readings of GDP, one of my students is actually -- she actually does this.

MR. MURRAY: (Laughter) What does her advisor think?

MR. STIGLITZ: Excuse me, how it goes, but are as or more accurate than the first

release of the GDP numbers in terms of the prediction of what really happened in the second and third release; so, at least it may be, going forward, that the CEA will be even more relevant.

MR. WESSEL: Great. Thank you. Please join me in thanking this panel. (Applause) And welcoming for some -- You guys can get up, yeah; because otherwise, Jason is going to give some concluding remarks, and I'm afraid, otherwise you'll get rebuttals if I let them stay up here.

After Jason finishes, I wondered if all the CEA Chairs could come up, so we can get some photographs, and the rest of you are welcome to hit the bar, before the CEA Chairs do. Jason Furman?

MR. FURMAN: So, thank you so much. It was a real treat listening to three of the best journalists, and ex-journalists ask three hours' worth of questions, none of which I had to answer. And I thought I'd summarize, but the danger of summarizing is that you got into the situation where everything has been said, but not everyone has said it, and I pretty much agree with everything that's been said, but thought maybe I'd use the last few moments here to challenge some of those propositions, and put forward four alternative contrarian propositions about the Council of Economic Advisers.

The first proposition I wanted to argue, is that the Council of Economic Advisers is not needed. Today's session actually provided some of the most definitive proof of that proposition that we have today, and that came not out of any of the discussions, but the randomized experiment we ran today, when all of our members, all of our staff, were here and the DOW rose 98 points since we arrived at 2:00 p.m., so the rest of them are doing just a great job on the economy in our absence.

But more importantly, this is something I tell, you know, our staff in staff meetings, that they don't actually need us, they can put out the budget without us having signed off on it, they can put out a tax policy, they can put out a regulation, we don't publish those things, no one says, you know, unless you've signed on the dotted line, that's not going to go out. And I think in many ways that's a big advantage of CEA; that we have to live by our wits, we have to be a bit scrappy, we have to show where we can add value. We have to persuade people, we have to show how we can be relevant.

And, you know, that happens on a wide range of issues on the topic of criminal justice, for example, that was an issue that we weren't involved in, and a member of our team, Emily Weisburst;

and our member, Sandy Black, wrote a memo, we sent it to some people, they thought it was really interesting, they gave it to the President, he talked to the Attorney General about it, and we became part of that conversation, and that wasn't because they weren't allowed to have that conversation without us, it's because they thought, maybe we actually, because we knew how to look at numbers, and think about means versus medians, that had something to add.

The second proposition is one that I might get in even, you know, more trouble for, is there's been all sorts of things about all the different things economists know, and all the wisdom of economists. I think, to go out on a limb, economists don't know everything, and there's lots of things we don't know. We don't know, or at least I don't know what GDP growth will be in the next quarter, or halfway through this one, we don't know exactly what it is in this one, and the last estimate we had for the last quarter was 0.7 percent, and the only thing I know, is the growth in the last quarter was not 0.7 percent. We'll eventually find out exactly what it was.

Commerce also don't know things for other reasons, between Joe, Austan, Glenn and Marty, we have the absolutely perfect optimal plan, to reform our tax system, we just don't know which one of the four of them it is that has that plan, and we could argue an awful lot about that. But I think some of the most interesting things we don't know are just things that have come up recently in the economy, novel policy questions, things people haven't put their mind to, and what economics may have is some discipline in terms of, you know, addition and subtraction, in terms of understanding incentives, in terms of tools, like Time-Series Econometrics.

And a good example of this was the renewable field standard, and one of the most impressive things any of you could ever see is what happens when you take a policy like that, which had been mired in all sorts of interest groups and politics, and who knows what, and then you add, Jim Stock, MATLAB, and I think three-quarters of the CEA staff for a six-month period of time, to the question; and how much of a better answer you come out with.

You know, I had a similar experience with the labor force participation rate that, you know, there had been economic research on it, but economic research tends not to be up to the minute, tends not to be thinking about, you know, what you are dealing with right then, and trying to really catch

up, you know, almost month by month, looking at the numbers, a little bit revising your views, doing some combination of literature of the original analysis watching the data, and using that to help inform what's going on, and recommending policies that we've done in areas like childcare, paid leave, and the taxation of secondary earners.

So I think not understanding everything, is one of the things that's really exciting. If all CEA did was take really obviously truths, and repeat them over and over again in meetings and then lament the sort of -- even though you repeat it over and over again in meetings, people didn't listen to you. That wouldn't be that interesting, I think it's figuring some of these questions out, and muddling through, and doing some combination of what you can take from the literature, what you can take from the recent data, how you can apply it in novel situations that; for me, makes the job really exciting.

Which brings me to my third point, which is, you know, going out even further on a limb, which is that there are actually other people in the government who don't work at the Council of Economic Advisers, who know things. You'll find them -- I'm a little bit biased having worked in another part of the government before -- but you see that on the policy side, there's a huge amount of expertise on policy, even in the White House, places like the NEC and the DPC, the Treasury, OMB, the agencies throughout government.

One of the great things I think is a lot of the problems we deal with, are on sort of Rival Risk turf, you know, whose equity is what; it's a hard problem, trying to understand why the labor force participation is falling and what to do about it, to use that example, and getting a bunch of heads together from different places can help do that. And you see a economists bonding in some ways, as Marty alluded to, across the government. But you see, you know, economists and non-economists trying to figure it out.

The other thing that people know is they know an awful lot about politics, legislation, communication groups and all sorts of things, and that's really relevant to the perfect idea, doesn't count for anything if you can't pass it through Congress. And President Obama is very much of the mind that he wants his advisors to stay in their lane. And every time I am tempted to jump out of my lane and offer all sorts of legislative, political and communications advice, I then briefly think about what I would think about

if the legislative communications and political person was jumping into my lane.

And think it's all for the better, if the President is the one that takes all of that and figures out how to integrate it. In a lot of ways that's really liberating, it means that we can come to the table and give unvarnished economic advice. That doesn't mean, you know, when you give option A, B and C, and A was better than B, that you are really bitter if the choice was B, if A could never have happened, and B can pass Congress, that is a perfectly great thing to have happened, but it means you don't need to encumber yourself with all of the same considerations.

Then the last point I wanted to make, maybe the most contrarian of all, is that I think good things can come out of Washington. They can come out of Washington in part based on economic and policy analysis. And the only caveat to that whole thing is sometimes you need to be a little bit flexible, in terms of how you define "good."

Just this past year, you know, we had allusions before to, you know, things used to happen decades ago, now the system is entirely broken. Just this past year we had worked together with the people from other parts of the government that know a lot too, to help design and put in last year's budget some reforms to the sustainable growth rate for Medicare, which is the doc fix which had been going on for decades, of this pay cut for doctors, and which happened abruptly.

And sort of everyone lamented it was a policy, every one dealt with it three months at a time, or a year at a time, this year bipartisan legislation, not just fixed the doc fix, but did it in a way that will lead better coordinated care, better payment for value, and shifting to the alternate payment models that are a broadly-shared goal for the future of the health system.

We saw an infrastructure bill, budget agreement and the tax agreement, none of which were the first bets from anyone's lights, but all of which, to different degrees, were informed by economic analysis that both that analysis, and advocacy, that explains that economics to people, help make all of those things happen. I have a long list of things that didn't happen in the last year, I would love to see some of them yet done this year.

I would love to see some of them get done the year after that, you know, weeding out the bad ideas is an important part of the process, but for me the most exciting thing is when you can, you

know, work on one of those good ideas, figure out how to explain why it's good and, you know, help make it happen. And so for me it's a little bit less the pulling up weeds, or planting seeds, or whatever it is, than planting 20 different seeds, and being really excited when you see three of them grow up and hoping maybe some of the other 17 eventually do, too.

So, you know, I think today has been a great discussion. It's been about substance, and trying to understand some of the process of economic policy. And so I would like to thank everyone for being here today for that discussion, and everyone who has taught me so much throughout my career, and today as well. So, thank you. (Applause)

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