
HEARING TRANSCRIPT

FROM: Michael Best Strategies
DATE: February 6, 2018
SUBJECT: Senate Banking, Housing and Urban Affairs Committee Hearing on Virtual Currencies, SEC and CFTC Oversight

Witnesses:

Mr. Jay Clayton, Chairman, Securities and Exchange Commission

Mr. Christopher Giancarlo, Chairman, Commodity Futures Trading Commission

Opening Statements:

Chairman Michael CRAPO (R-ID):

Virtual currencies are meant to act as a type of money that can be traded on online exchanges for conventional currencies, such as dollars, or used to purchase goods or services predominantly online. Additionally, developers, businesses, and individuals are selling virtual coins or tokens through initial coin offerings, also known as ICOs, to raise capital.

Over the last year, many Americans have become increasingly interested in virtual currencies, especially given the meteoric rise in valuation, and recent fall of Bitcoin. Just for perspective, on January 2 of last year Bitcoin broke the \$1,000 barrier, then peaked in December of 2017 at almost \$20,000, and as of this morning, is trading at roughly \$6,900. Today the market capitalization of Bitcoin is roughly \$115 billion.

This is an incredible rise, given that in 2013 when this committee had subcommittee hearings on the topic, the total value of Bitcoin in circulation was approximately \$5 billion.

As virtual currencies have become more widespread, financial regulators and heads of financial institutions have noticed and voiced their opinions. Regulators and heads of industry have tried to educate investors so that they make informed decisions and ensure that the markets they oversee and participate in are working appropriately.

For its part, the SEC has put forth many statements and guideposts to help the markets and investors. Namely the SEC has issued investor bulletins on initial coin offerings, issued an investigative report on what characteristics make an ICO a security offering, issued several statements by Chairman Clayton on the issue, brought enforcement actions against fraudsters, and issued joint statements with the CFTC about enforcement of virtual currency-related products.

The CFTC has also been helping inform the markets by launching a dedicated website on virtual currencies to educate investors, bringing enforcement actions against individuals involved in cryptocurrency-related scams, issuing several statements by Chairman Giancarlo and others, on the issue, and scheduling hearings on the topic.

Much of the recent news about virtual currencies has been negative. Between the enforcement actions brought by your agencies, the hack of the international Coincheck exchange, and the concerns raised by various regulators and market participants, there is no shortage of examples that increase investor concerns. It's also important to note that the technology, innovation and ideas underlying these markets present significant positive potential.

These aspects underpinning virtual currencies have the ability to transform for investors the composition of and the ability to access the financial landscape, thus changing and modernizing capital formation and transfer of risk. Technology is forward-looking and we look to our regulators to continue carrying out their mandates, including investor protection as markets evolve.

Ranking Member Sherrod Brown (D-OH):

Virtual currencies, Bitcoin specifically, have captured the attention of investors and speculators and computer programmers and regulators all over the world. I don't know how many people imagined how quickly and broadly that coin and the technology it's based on would spread. It's nothing short of remarkable to be sure.

It's critical for our regulators to understand innovation and technology so that markets can grow and evolve while investors and consumers are protected. Understanding the risks of emerging technologies is no easy task, but we rely on you to maintain the integrity of these new markets and minimize the risks to Americans who want to participate in them. The volatility of Bitcoin has been also remarkable, defying attempts to think of it as a traditional currency.

Bitcoin's 1,000 percent rise last year and 60 percent decline last month makes yesterday's Dow Jones record point drop look almost like a rounding error. But that growth has shown us the intersection of ingenuity and too often, greed. Sometimes it appears that scam artists and hackers may understand more about the technology than most market participants.

That should concern all of us. I hope our witnesses today help us understand the evolution of the markets related to virtual currencies, raise awareness of the many threats involved and identify the regulatory gaps. Each of you has made several public statements recently, explaining the threats to investor protection and the potential for abuses in virtual currency markets. And I understand neither the SEC nor the CFTC has sufficient authority to police all aspects of virtual currencies.

But you must make the most of the authority you have. As you both noted in the Wall Street Journal, Bitcoin mania has some analogies to the dot com bubble of the late '90s. I hope there are lessons from that era you draw on to do your job to protect investors. In addition to the investment risk, virtual currency may be used to fund illicit activity, especially outside the United States.

I know the regulatory framework in other countries is still in development. I'm pleased that the U.S. and FinCEN in particular has been a leader, but we can do more. I hope the Chairman agrees with me the committee needs to look closely at the gaps in regulation in this area and to review our agency's ability to get ahead of the curve.

As you begin to adapt to the unique enforcement of regulatory demands posed by virtual currencies, I call on both of you not to forget your day jobs to pursue and punish more traditional misconduct, but very serious misconduct wherever it might appear. That means Main Street, it also means Wall Street.

I'm concerned it's business as usual when it comes to violations by the big banks. Just last week, the CFTC imposed penalties on three big banks for market manipulation. Good. But then decided those firms deserve waivers from bad actor provisions under the securities law. That might make sense if this were an isolated incident, but the banks in question have something like 68 violations over the last 10 years. So it's very, very serious.

Too often, we see big banks pay fines and move right along with little contrition and frankly no serious punishment. Recidivist violators won't stop breaking the laws if your agencies serve as sanctuaries. I've raised the issue of waivers over the years. I'm disappointed in your unwillingness to pursue every avenue available. It's clear that virtual currencies bring us into a new age, but that doesn't mean we overlook the basic principles of going after the bad guys and being tough when they are repeat offenders.

Witness Testimonies:

Mr. Jay Clayton:

On the important topic of cryptocurrencies, initial coin offerings, and related trading activities, the total market capitalization of all cryptocurrencies was estimated at \$700 billion earlier this year. In 2017, ICOs, initial coin offerings, raised nearly \$4 billion. These markets are local, national and international.

Today, I will attempt to level set where we stand from a market regulatory perspective. My remarks may be viewed by some as overly simplistic, but they reflect how I present these issues to main street investors. For ease of analysis, I break this space into three categories.

First, a promising new technology referred to as distributed ledger technology, or blockchain. Proponents of this technology assert that it will bring great efficiencies to our national and global economies, including our capital markets. I hope that it does, and the commission looks forward to working with market participants who seek to bring efficiencies, including more effective oversight, to our markets.

The second and third categories are cryptocurrencies and ICOs, which are subsets of the products seeking to take advantage of the commercial opportunities presented by blockchain technology. One is promoted to be a replacement for dollars. The other is like a stock offering.

Cryptocurrencies, some of the more widely known cryptocurrencies were introduced as substitutes for traditional currencies, such as the U.S. dollar or the euro. Those who promote these so-called virtual currencies have asserted that they will make it easier and cheaper to buy and sell goods, particularly across borders. They have asserted that transaction and verification fees and costs will be eliminated or reduced. To date, these assertions have proved elusive in many areas.

ICOs, from what I've seen, initial coin offerings are securities offerings. They are interest in companies, much like stocks and bonds, under a new label. Promoters use the term coin, based on the fact that the security being offered is represented by a digital entry or coin on an electronic ledger, as compared with a stock certificate and a related entry in a company's records. You can call it a coin, but if it functions as a security, it is a security.

Also importantly, an ICO may have nothing to do with distributed ledger technology beyond the coin itself. Buying an ICO does not mean you are investing in blockchain related ventures. There are many problems with the way cryptocurrency and ICO markets are operating.

But two are worth particular attention. First, the market for these products have substantially less oversight than our traditional securities markets. To be blunt, if you are trading cryptocurrencies on a platform that looks like a stock exchange, do not take any comfort from that look.

Our stock exchanges have extensive rule sets and are required to conduct surveillance. Also broker-dealers who facilitate securities trading have capital and conduct requirements. These requirements and others, without a doubt, are necessary to protect those markets and our investors.

Secondly, many ICO's are being conducted illegally. Their promoters and other participants are not following our securities laws. Some say this is because the law is not clear. I do not buy that for a moment. The analysis is simple. Are you offering a security? If so, you have a choice. Follow our private placement rules or conduct a public offering registered with the SEC.

A note for professionals in these markets, those who engage in semantic gymnastics or elaborate structuring exercises in an effort to avoid having a coin be a security are squarely within the crosshairs of our enforcement division. So what are we doing about these problems? I look forward to discussing with you that question in more detail. But we'll start with a comment on jurisdiction and a comment on enforcement.

We, the SEC and the CFTC do not have direct jurisdiction over the popular markets that trade true cryptocurrencies. This is not an oversight. It is the result of a new product and market. The traditional currency markets did not need direct regulation by market regulators such as the SEC or the CFTC. They are sovereign-backed and regulated with a long history.

Cryptocurrencies, on the other hand, have no sovereign backing or oversight. And again, to be blunt, are currently functioning as assets for trading and investment much more than as mediums for exchange. Please do not view this description as a request for expanded SEC jurisdiction. If asked, we will work with other regulators to evaluate and address this issue, including our friends at the Fed, our friends at the CFTC and the state regulators; they all have a keen interest in this market.

To the extent that digital assets like ICO's are securities and I believe every ICO I've seen is a security and we have jurisdiction and our federal securities laws apply. We will enforce these laws. Many of these laws also include private rights of action. We are working with the DOJ and other regulators to enforce these laws.

Mr. Christopher Giancarlo:

I'm the father of three college-age children, a senior, a junior, and a freshman. During their high school years, we tried to interest them in financial markets. My wife and I set up small brokerage accounts with a few hundred dollars that they could use to buy stocks. Yet other than my youngest son, who owns shares in a videogame company, we haven't been able to pique their interest in the stock market.

I guess they're not much different than most kids that age. Well, something changed in the last year. Suddenly, they were all talking about Bitcoin. They were asking me what I thought and should they buy it. One of their older cousins who owns Bitcoin was telling them about it and I got all excited. And I imagine that maybe members of this committee may have had some similar experiences in your own families of late.

It strikes me that we owe it to this new generation to respect their enthusiasm about virtual currencies with a thoughtful and balanced response, not a dismissive one. And yet we must crack down hard on those who try to abuse their enthusiasm with fraud and manipulation.

I mean, we must thoroughly educate ourselves in the public about this new innovation, and we must make good policy choices and put in place sound regulatory frameworks to reduce risks for consumers.

Putting my CFTC hat back on, I suggest that the right regulatory response to virtual currencies has at least several elements. And the first is to learn everything we can. At the CFTC we've launched a new initiative called LabCFTC to engage with these innovators and inform the agency about virtual currencies and other financial technology.

Next is to put things in perspective. As of 8:00 AM this morning the total value of all outstanding Bitcoin is about \$113 billion. We have a slightly different figure than you have, Chairman, but close. But the point is that that's less than the market cap of one large, publicly traded company, McDonalds.

The total value of all virtual currency in the world is around \$313 billion. In comparison, global money supply is around \$7.6 trillion. And because Bitcoin is sometimes compared to gold as an investment asset, the value of all the gold in the world is around \$8 trillion, which dwarfs the size of the virtual currency market.

The next task is to tell the public what we learn and educate consumers. There's a lot of noise around virtual currency, and regulators must help set the record straight. The CFTC has produced a large amount of consumer education materials on virtual currencies, including written statements, podcasts, webinars, and a dedicated Bitcoin website. We've even scheduled visits to libraries and briefings for seniors. We've never conducted this much outreach for any other financial product.

Another element is regulatory coordination. Because no one agency has direct authority over virtual currencies, we have to work together. That includes us, the SEC, the Fed, the IRS, the Treasury's FinCEN network, and even state banking officials.

And the next element is to exercise our legal authority over derivatives on virtual currencies while clarifying our statutory limitations. To be clear, the CFTC does not regulate the dozens of virtual currency trading platforms here and abroad. We cannot require them to meet requirements like trade reporting and market surveillance, standards for conduct, capital requirements, or even cyber protections or platform safeguards. These are all standard regulations in the futures markets we oversee.

Yet through our authority over commodity derivative markets, we do have enforcement power over spot-coin markets. And with newly launched Bitcoin Futures, the CFTC can now obtain trading data and analyze it for fraud and manipulation in five underlying spot markets.

And that leads to the final element, and that is tough enforcement. Led by the CFTC's Virtual Currency Enforcement Task Force, we've launched several civil actions over the past few weeks cracking down on fraudsters and manipulators, and more will follow.

In closing, I want to quote something that Chairman Clayton and I wrote recently in the Wall Street Journal, "These markets are new, evolving, and international. They require us to be nimble and forward-looking and coordinated with state, federal and international colleagues and engage with important stakeholders, including Congress."

Question & Answer Portion:

SENATOR CRAPO (R-ID): Both of you have said in one way or another that neither of your agencies have complete jurisdiction over cryptocurrencies. The question I have is whether you have sufficient jurisdiction. And I'd like both of you to address that question. Should Congress address revising and refining our financial law so that one agency or a group of agencies have complete jurisdiction, or if you look at the jurisdiction of all agencies today, do we have sufficient jurisdiction in place today?

CLAYTON: We should all come together, the federal banking regulators, the CFTC, the SEC, there are states involved as well, and have a coordinated plan for dealing with the virtual currency trading market. I think our Main Street investors look at these virtual currency trading platforms and assume that they are regulated in the same way that the stock exchange is regulated. And as I said, it's far from that. And I think we should address that issue.

CRAPO: So am I hearing you say that you don't think we need to have additional legislative authorities?

CLAYTON: I think we may. I think we may.

CRAPO: So first, you should get together and tell us what you can and can't do and then advise us.

CLAYTON: I think that's a very good way to put it, Senator.

CRAPO: Chairman Giancarlo.

GIANCARLO: I think that's exactly right. I think the first step is to recognize where the gap is. So, there is as we both said in different ways what we call the spot market for Bitcoin is not a regulated marketplace. Now, for us at the CFTC, we're familiar with that because we generally don't have regulatory supervision over the spot markets for which derivatives apply.

That is a longstanding basis. We regulate derivative markets. The underlying markets we surveil and we will take enforcement action for fraud and manipulation. But we don't have the ability to set the standards on those markets. And that's what we have today in Bitcoin. And unless it's an ICO, then as Chairman Clayton described, he also doesn't have the jurisdiction.

So there is that gap and I think the starting point for an informed conversation is there is that. Now, there are other elements to it. There are other agencies that come to bear on this. So state regulators, there's a patchwork of state regulation across the nation. Some states have been very assertive in this area. Other states less so, and some states have nothing; FinCEN, as you referenced, has also been active in the area in terms of anti-money -- money laundering and -- and know your customer requirements.

So there's a patchwork here but there's not a comprehensive structure. And that's something that I think is a -- is a policy discussion, an important one to be had.

CRAPO: All right. Thank you. And you've led to my next question. Much of the activity in the virtual currency markets is cross-border and international. And so that raises, obviously, the question of what challenges does that present and what is the appropriate role for FinCEN?

CLAYTON: The international nature of this market is why a patchwork is probably not sufficient, if it's going to continue to develop as a -- as a significant market and one that our -- our Main Street investors access. From FinCEN's perspective, there -- there are reports that we all have heard that this currency -- these cryptocurrencies are used for illicit activity. I think FinCEN has been stepping up in that regard and I encourage them to continue to do so.

GIANCARLO: And this challenge of global markets is a challenge that I think we face now in many regards in the 21st century. With the dawn of the internet, markets have become truly global, and not just in virtual currencies but so many things. And it does become a challenge as we think about regulation. We certainly have had that challenge working with overseas regulators in the area of derivatives regulations as a result of the Dodd-Frank Act.

The challenge of bringing these regulations together in a comprehensive whole is -- is really a tremendous challenge for all of us. So in this area, it requires a lot of new thinking.

CRAPO: I would encourage you to form that workgroup, get together between yourselves, the state regulators, other appropriate federal regulators and evaluate exactly what our regulatory structure should look like in America to deal with this. And let us know your thoughts -- your further thoughts on that. I'd appreciate that.

SENATOR BROWN (D-OH): Last year, initial coin offerings raised about \$4 billion globally. You've testified that SEC is focused on policing these transactions to protect investors. How much of that \$4 billion was raised in the U.S.?

CLAYTON: It's not clear. It's hard to get a number on that because this has been conducted on largely an unregulated basis. But I imagine a significant enough portion where we should be paying attention.

BROWN: And my understanding is during the last few months, the SEC's taken four enforcement actions targeting coin offers for serious violations of law. I mean, that speaks volumes about the work that -- the challenges in front of you. The Chairman -- in response to the Chair's question, you both talked -- leading with you, Chair Clayton -- about agencies working together and the importance of that on this and other issues.

Your testimony highlights cooperation between the SEC and CFTC, Chair Clayton, regulating Bitcoin and other virtual currencies. It doesn't mention any cooperation with the Consumer Financial Protection Bureau. Hundreds of consumers have filed complaints with the bureau about virtual currencies. How have you been coordinating your work, specifically on this but in other areas too, with CFPB?

CLAYTON: On this area, largely through the FSOC. At the FSOC, I believe I have made it very clear my views in this area and that this is an area that we should all be on the lookout for -- on the lookout with regard to, from each of our perspectives. The CFPB is a member of FSOC and they have heard my comments there. On a -- on an enforcement perspective, we're in the securities area.

We don't see the CFPB on the securities side of this. I'm not aware of any direct coordination on a -- on a particular enforcement action, but I could check on that.

BROWN: OK. In the past few months, Deutsche Bank, Credit Suisse, UBS, HSBC have been fined over \$300 million by other regulators for various forms of market manipulation. But SEC has been quiet under your watch. One study by a Georgetown law

professor found that SEC had quote, virtually stopped enforcement actions against large entities, often referred to as Wall Street firms. How do we have confidence, Mr. Chairman, in the SECs willing to hold Wall Street accountable when the trend, and penalties, and actions is going the wrong way?

CLAYTON: I saw that report. It probably doesn't come as a surprise to you that someone sent it to me. I found it annoying, to be honest, because it didn't reflect the fact that the gestation period for the cases we bring is roughly 22 to 24 months so any type of statistics necessarily have a latency period to them.

Our enforcement division put out a report that talks about the numbers in a comprehensive way. I'm happy with that report.

I'm also confident that the people who are in our enforcement division and leading it, many of them former federal prosecutors, two of them heads of the securities task force in the Southern District of New York -- former heads -- are pursuing our securities laws vigorously, I have no doubt. They come to work every day and they have my full confidence.

BROWN: Well I hear you say that and I believe you when you say that. I remember the last SEC and it wasn't you, the last SEC under a Republican President, how they were asleep at the switch. So as the Chair of the Governor of the Richmond Federal Reserve used to tell me, "Watch us and let us know you're watching us."

But I'm further troubled by a statement by one of the SEC's enforcement co-directors last fall, that SEC might lose 100 of its enforcement staff by not replacing those who leave. Compared to 2016 figures, this would reflect a seven percent reduction enforcement head count. So how are you going to stay on top of developments in virtual currencies, and the other enforcement -- all the other areas that we just talked about, and then to be able to fight traditional misconduct, how are you going to do that when you're not replacing the -- if, in fact, that's the case?

CLAYTON: That is-- Senator Brown, personnel is my biggest challenge at the moment. And we have a -- we have a hiring freeze as a result of natural increases in costs, a hiring freeze and people, you know, retiring or taking other jobs. It reduces the size of the workforce at the SEC.

I could use more people in enforcement. I could use more people in trading and markets. Those are the two areas where I think the American people would get the greatest return for additional bodies.

BROWN: So when you come in front of us, and I appreciate your candor -- when you come in front of us and tell us that you're having trouble filling those jobs and the --

CLAYTON: No, trouble -- I'm not -- I just can't.

BROWN: Well, OK. I guess trouble that way, all right then, because of the freeze. Isn't that message to those who -- those who want to game the system and those who want to defraud the system, isn't the message is the SEC is -- is not the cop on the beat that even the new chair wants it to be?

CLAYTON: Do I want more bodies to do more? Yes, sir. Is the message that somehow that somehow we're asleep at the switch? Absolutely not.

BROWN: And with your budget that's coming out, our understanding is the budget -- it -- I mean, I -- I hope the freeze is lifted, I hope the budget is enough, and I hope that you will speak to us and ask particularly people on the other side of the aisle for the dollars you need and the flexibility you need to put those cops on the beat.

CLAYTON: I'm -- I think I've -- I think I've been very straight about incremental amount of money and where I think value can be added.

SENATOR SHELBY (R-AL): Chairman Clayton, you and Chairman Giancarlo, you're chairmen of two powerful regulatory bodies, but you have different jurisdictions. Anything that smacks of security comes somewhere in your range, does it not? Dealing with a commodity, something that could be deemed a commodity, clearly comes in your range. The Federal Reserve is the biggest bank regulator we have, and also the Treasury is involved in this.

How are you going to put together a task force? Do you -- can you do it on your own, through the administration, to deal with cryptocurrencies? Because you've got the Fed, you've got the Treasury, you've got the commoditisers, you've got the securities, perhaps some others that we hadn't thought about, before this gets out of control somewhere in the world.

CLAYTON: By recognizing the Treasury Secretary, he -- he has brought us together, the CFTC, the SEC, and representatives of the Federal Reserve, to talk about this. Because, Senator, you're exactly right. The funny thing about these cryptocurrencies is, they only work if they're integrated with -- they only work for their purported purpose if they're integrated with the financial system. And so therefore it necessarily touches on all of our regulation, but.

GIANCARLO: I'll just reinforce that. The Treasury Secretary has been out on front on this. He's formed a virtual currency working group of ourselves, the SEC, the Fed, and FinCEN. We've had a number of our preliminary conversations and work streams developed.

I've had a number of bilateral conversations with the Treasury Secretary on virtual currencies, and we are going to be coordinating our various responses to -- it's begun with just some broad conversations establishing our different jurisdictions, so that we're all clear as to what we're doing, but also what we're not doing, where the gaps are.

SHELBY: Do you need additional legislation in this area of-- to both of you, or can you think you can work it-- a task force together, to get your arms around this, without that?

CLAYTON: I can't give you a definitive answer to that question, because we should work together, but, Senator, we may be back with our friends from Treasury and the Fed to ask for additional legislation.

SHELBY: But, you know, we live in a virtual world. We go to the doctor and they give you a virtual examination, you know? You -- we can go here in some virtual -- and this is -- was not my world, I started out pencil and paper in school, as you can imagine, but -- in my day.

But at the same time, this currency, these cryptocurrencies, they have -- they lack intrinsic value, it seems to me. They lack liquidity. Sure, people have probably made a lot of money going up, and lot of them made money and lost money going down, but I don't know where the bottom is, if the bottom was ever reached, as opposed to a sovereign-issued currency.

You disagree?

GIANCARLO: No, Senator. I don't know where the natural equilibrium point is in this, but I will tell you there are some economists who posit that there is a relationship between Bitcoin value and the difficulty or the cost of mining these -- the -- which is a process of electronically producing these, and that there are some charts I've seen that have plotted that correlation that seem to be readily correlated until last summer, when the price broke free of that correlation and that they -- it came back into correlation late at the end of the year, last year.

Now, I'm not an economist. I find those things fascinating, but I'm not an expert at it. But the -- the -- the point the economists are making is that there is some sort of floor that -- that -- that -- the level set is not zero, that there is some floor there tied into the cost of mining of Bitcoin. And I'm not endorsing that point of view, I'm just sharing that with you.

SHELBY: Chairman Clayton, do you have any comment?

CLAYTON: Yeah, look, I -- there are a lot of smart people who think there's something to the value of the cryptocurrency and the international exchange. And I'm not -- I'm not seeing those benefits manifesting themselves in the marketplace yet. And from the perspective of -- look, I look at this from perspective of protecting Main Street investors. They should understand that.

SHELBY: How do you put a value on cryptocurrencies? Does the market put a value on it? Or does it go straight up then straight down or what?

CLAYTON: Well that's -- you know, what's something worth? It's what somebody is willing to pay you for it. But -- but in our world, the securities world, you know, there are rules that dictate how much you have to tell somebody about what it is they're -- you're selling them.

SHELBY: But part of your mandate -- or the Security Exchange is to protect the investor, is that right?

CLAYTON: That's right.

SHELBY: And the chairman of the Commodity Futures Trading, he's -- he's seen, obviously, commodities just go wild at times. And yours -- your mandate is to watch the commodities, right?

GIANCARLO: Market integrity is generally perceived to be our core mandate.

SHELBY: You also mentioned personnel. You know, you need personnel. There's a hiring freeze on. We talked the other day about -- and this goes -- gets into the realm of appropriations and so forth. I'm hoping that we -- we'll give you every tool you need to do your job and to hire the people that you need to execute that.

SENATOR REED (D-RI): Following on the questions of Senator Brown and Senator Shelby, you do need more personnel, but very specifically, do you have the technologists, the computer experts that can begin to understand how these crypto currencies work? The cryptologist?

And not just to sort of on a day-to-day basis, sort of, you know, give you the temperature, but look ahead and say this is the direction it's going which could have very significant deleterious effects. Do you -- do you have anyone like that on the staff, Mr. Clayton?

CLAYTON: The answer to your question is we formed a cryptocurrency working group, a cyber group. They've done a -- they've done an exceptional job getting up to speed on this in a short amount of time and identifying some of the very issues you talk about. Could -- in an emerging area like this, could you use more horsepower? Always.

You make a very good point, Senator, on looking -- looking out across the international nature of this and trying to understand where it's going to land and do the -- do the things that people say add up? That's -- that is a very important...

REED: Where are the technologists located? If you don't have them. I presume you don't. Is it...

CLAYTON: I would say it's a combination of economists and technologists. It's a question of, you know, here's what the technology is and does it make economic sense. We have those people in our economics division, DERA. And we also have some of them in enforcement, and they work together.

REED: But you need more? Yes. I'll take that as a yes.

Mr. Giancarlo, same question. Do you have the technologists that you're working together?

GIANCARLO: Thank you, Senator Reed. We've done a couple of things in 2017 too -- as -- as Senator Brown said, to get ahead of the curve. We hired the agency's first ever chief innovation officer, someone who comes with a deep background in a lot of these new financial technology innovations. We also created something called LabCFTC, which is our innovation hub.

And you asked where is it located; it's actually located in New York City. Because so much of this innovation is taking place there, we wanted to be close to these innovators to learn from them. But in terms of protecting consumers, we also formed a virtual currency enforcement task force. It was actually that task force that recently brought three civil actions against Bitcoin fraudsters and as I said in my testimony, there's more to come.

And as to the resource questions, we do need more resource. I used our bypass authority last year to put forward a budget request of 13 percent over our budget. We had been flat funded for three years and we do need additional resources. And built into those resources are additional resources for Fintech, generally, and cyber and cryptocurrencies, specifically.

REED: Let me just elaborate a bit. We continue to refer to Bitcoin. That is just one cryptocurrency. They seem to me proliferating, that every day there's a new variety of cryptocurrency. Some of them are now fraudulent, some of them based on the same Bitcoin technology or processes. But just sheer expansion of these cryptocurrencies is an issue, one.

And then two, because my time is short and I have one other slightly unrelated question of Chairman Clayton - is, are you tracking all these different daily emerging currencies, one. And two is -- again goes back to my sort of step back question -- is someone looking long-term at the systemic effects, you know, where are we going to be.

This is eerily reminiscent of the late '90s and derivatives, which were nominally small parts of the market that were esoteric, et cetera. And then of course, 10 years later, exploded.

GIANCARLO: So, you're absolutely right. Bitcoin is one of many. However, of the many, there's really just a handful that have gotten significant traction and so that's important, though, for listeners to know, because so many of these are fraudulent, as you said.

We went after one. I just mentioned it because I think it's interesting -- called My Big Coin, which became known as My Big Con by people that were defrauded by it.

It was people that really were taking -- it was a Ponzi scheme. They were taking consumers' money and using it to buy houses and furniture and jewelry. And we went after them and went after them hard and we will continue to do that. In terms of systemic risk, right now this is still a relatively small market, just by ratio. But as you say, we have to watch it and watch it carefully.

CLAYTON: So as I mentioned, the SEC doesn't have direct jurisdiction over the pure cryptocurrencies. But we have had to watch it because of course they're integrated with the markets that we do oversee. And your -- to your question of does 10 make sense or 15 or 20 make sense. You know, I have a hard time getting my head around that. Because if it's an efficient -- if it's efficient medium of exchange, 15 of them fluctuating different places probably doesn't make a lot of sense to me.

But you know, that's where I'm at. On systemic, look, I agree with Chairman Giancarlo. But if people are getting ripped off, that presents reputational risks that can have systemic effects.

REED: We can go into a raft of questions; money laundering, evading, et cetera. But, just changing gears for one second, and I'll make a comment and then follow up with a written question. There is some consideration, I have heard, of the SEC allowing in public offering -- initial public offerings, bars to suit, i.e. forced arbitration. I think that would be a very bad idea, and I'll make the argument, and right to you.

SENATOR ROUNDS (R-SD): I go back to where I learned with a pen and pencil to begin with as well, and we did not have a quill at that time, but we did have number two lead. And as I get in to this and learn more about this thing it's fascinating to see how quickly things are moving, and yet everything that we talk about seems to translate back into dollars and cents, yet. That has not changed.

Until now, and suddenly we're talking about a new type of exchange, and it sounds almost like bartering to me and it's a bartering which could avoid the determination of a value in dollars and cents. Which brings up the question of how do you tax it, if you need to? How do you recognize income?

But also, in this particular case, I noticed both of you identified that you have additional -- or, you have existing resources and regulatory oversight capabilities that you are utilizing today, and while I question whether or not there are seams that have to be filled, it would appear that some basics that maybe a lot of us don't quite understand still have to be answered.

And I just want to start out, because I think Mr. Clayton, you started with this discussion with regard to the issue of whether or not you had control over in ICO, and the fact that if they were issuing, in this particular case, Bitcoin, or the opportunity to market it, you had identified it as a stock, or at least a value of something.

What is, in this particular case, that thread that you utilize, once again? And can you delve into that a little bit more? About how your agency responds to the regulatory need in this particular case. What is the specific item that you look at as being an item which is subject to your review, a security in what?

CLAYTON: The definition of a security is broad. And it includes -- I'm going to try -- I'm going to not use the technical terms -- there are Supreme Court cases and things -- but it includes when, if you are offering me a security, or offering me something, a coin, and I give you money. And the purpose of me giving you that money is to profit from your efforts going forward.

So if I give you -- if I give you money, you give me a coin and you say, I'm going to -- I'm going to take the money, and I'm going to grow a business," and that's going to increase the value of that coin. And by the way, Chairman Clayton, you can trade it to somebody else. So, you may be able to get value for it tomorrow. In fact, you probably will get value for it tomorrow; buy now so you can get more value for it in a few days. That's a security.

ROUNDS: So, commodity-wise, if we're looking at trading commodities, you would not have an interest in the subject of investigating or reviewing whether or not the trading of an ag commodity, (inaudible) something (ph), and yet when we talk about the CFTC, we're talking about a different story, where commodities most certainly are an item of interest to you.

Is Bitcoin or are these as currently being traded, are they a commodity or are they a security or are they both?

GIANCARLO: What's so challenging about Bitcoin is it has characteristics of multiple different things. One of the phrases that's often used is that Bitcoin is a medium of exchange, a store of value or a means of accounts. Well those three things have different

connotations to them. If it's a means of -- medium of exchange, then it's like a currency-like instrument. And yet, as we've seen, a number of means of exchanges have been closed to Bitcoin.

There was recently a Bitcoin conference that stopped accepting Bitcoin for registrants because they couldn't process the payments. So -- but yet it's still spoken of as perhaps a means of account. And in that case, it has implications from the Fed and currency. From our point of view, when it's used as a store of value, then it's very much like an asset, like a commodity.

And in fact, what we hear a lot of is people buying and holding. If you -- if you go on to the Twitter universe, you'll see a phrase HODL, which means hold on for dear life. And the -- the thinking is, is that they buy it and hold it. In fact, I -- I mentioned in my opening remarks, my 30 year old niece who bought Bitcoin years ago and she's an HODL.

She says I'm going to own it, I don't know what's going to come of it but I want to hang onto it. And she's not a fraudster or a manipulator, she's just a kid and believes in it. And, you know, I was fascinated talking to her. And I think she represents a lot of folks that think there's something in this, I want to hold onto it. And so in that regard, it's a -- from our point of view, it's a commodity.

And if there's a derivative on that, we regulate it. The problem is in the cash market, we don't have regulatory authority, means we can't set the standards. But what we will do and we are doing is looking for fraud and manipulation. And we intend to be very aggressive, if nothing else, so that people like my niece can have some security that there's not fraudsters and manipulators out there.

And there are far too many of them.

SENATOR WARREN (D-MA): So Chairman Clayton, on January 26, Bloomberg published an article entitled, "SEC Weighs a Big Gift to Companies: Blocking Investor Lawsuits." Now as you know, class-action lawsuits are how investors can hold companies accountable when they defraud people. And the article says the SEC is thinking about letting companies sell shares in initial public offerings while at the same time allowing those companies to prohibit investors from bringing class action lawsuits against them.

Wow. I mean, forcing investors to give up class actions when they've been defrauded. The SEC has never allowed corporations to bar investors who get cheated from bringing class action lawsuit. So I just want to get a straight yes or no answer from you on this. Do you support this enormous change in SEC policy?

CLAYTON: I think you know that I can't prejudge an issue that may come before the SEC, but I -- I'd be happy to talk to you about this and let me get to the -- let me to the bottom line. I can't dictate whether this issue comes before us or not, because of the way it has come before the SEC in the past. But I'm not anxious to see a change in this area.

WARREN: OK, so I'm reading tea leaves here.

CLAYTON: No, you aren't reading tea leaves. I'm not -- I'm...

WARREN: I mean, you run this agency. The change can't happen without your approval. I think it's...

CLAYTON: Actually, that's actually not right. If it came up before the agency, I'm only one of five votes.

WARREN: I'm going to guess there are going to be at least two votes against that. And that you, at best, will be the deciding vote.

CLAYTON: Senator, I don't want to pre-judge the issue. If this issue -- look, I want to be practical. If this issue were to come up before the agency, it would take a long time for it to be decided because it would be the subject of a great deal of debate. And like I said, in terms of -- in terms of where we can do better, this is not an area that is on my list for where we can do better.

WARREN: OK, so I tell you what Chairman Clayton, I'm going to let you get away with that. Because what I'm reading is real skepticism about a rule like this.

You know, the SEC's mission is to protect investors, not throw them under the bus. And I can't think of anything that would do more harm to investors than saying they have to pre-waive their rights to sue a company in a class action when that company cheats them. So...

CLAYTON: Like I said, it's not a -- it's not a -- it's not a change that's on -- it's...

WARREN: I hear you. So let me ask you about something else and that's the fiduciary rule. Financial advisors who put the high fees, the commissions, the kickbacks, the prizes they can get for recommending a specific product ahead of the interests of their clients cost hard-working Americans trying to save for their retirements about \$17 billion every year.

And that's why President Obama and the Department of Labor put the fiduciary rule in place, to eliminate these conflicts of interest in retirement accounts, like 401(k)s and IRAs. Now, less than a month after you were sworn in as Chairman of the SEC, you issued a request for information asking for public comment on rulemaking related to the standards of conduct for investment advisors and broker-dealers.

Can you state to this committee that any rulemaking you do on this topic will not weaken the existing protections for retirement savers?

CLAYTON: Making an absolute statement like that...

WARREN: Yes. An absolute statement that you are not going to weaken rules for people who are trying to save for their retirement.

CLAYTON: Based -- from what -- from what baseline? Let me...

WARREN: Well, we have a -- we have a rule from the Department of Labor. Now, you could strengthen the rule, you could pass the same rule, or you could weaken the rule. I want to know that you're not going to weaken the rule. That's all I'm asking you.

CLAYTON: Here's what I'm trying to do. Let me tell you what I'm trying to do. The relationship between investment advisor broker-dealer and their client in a very simple area -- they have a 401(k), they have an annuity and they have a few stocks, is regulated -- throw out the banking regulators. It's regulated by no less than five people.

And they all have different standards. But my main objective is to bring clarity to that without jeopardizing investor protection. That's how...

WARREN: Well -- but that's the question I'm asking, about whether or not you're jeopardizing the protection that people who are trying to save for their retirement get. I get that you could bring clarity. Clarity could be to do whatever you want. Clarity is what is -- right now has cost American investors saving for their retirement \$17 billion a year.

CLAYTON: I think it's a combination of an insufficient standard in some places, which we are looking to increase...

WARREN: I'm glad to hear that.

CLAYTON: ...a lack -- a lack of clarity and also, the standard is only as good as the remedy available. And one of the things that I'm also looking at -- believe me, I've spent a lot of time at this space trying to get it right. One of the things we're looking at is what dollars do you actually collect when somebody has done you harm. Because you could have a really strong standard but if there are no dollars there, that's a problem.

WARREN: I agree with you, Mr. Chairman. If you want to strengthen enforcement of this rule or strengthen the rule itself, count me in. But that's what the American people look to the SEC for. Thank you.

SENATOR PURDUE (R-GA): I want to go change the subject a little bit back to Bitcoin here, or to cryptocurrencies. You know, we see in IPOs and tax, jurisdictional arbitrage. Do you guys see that today in this developing cryptocurrency and also in ICUs -- ICOs? Chairman Clayton, you want to start with that?

And by the way, who pays for frivolous class action lawsuits? Who pays for that?

CLAYTON: Shareholders.

PURDUE: Yes. And investors, I would argue customers, employees, all the above, right?

CLAYTON: Yes.

PURDUE: Would you answer the other question for me, please?

CLAYTON: So regulator arbitrage is one of many issues that I see in this market. To be -- to be frank, you know, tax loss and things like that are there. Of course they are. Because the record keeping, it's difficult to trace...

PURDUE: So where the -- South Korea and China are the ones that predominantly play in this war. You said before most of the current -- most of the current investment comes from the U.S. I'm not sure -- I don't know if we all know enough yet to know that, right? South Korea and China are really heavily invested. In fact, China now -- or South Korea has a new rule that says you have to use real name bank accounts in order to trade in this.

CLAYTON: Yes. I think...

PURDUE: And those are the kinds of things I'm asking for. Is there arbitrage really going on around the world here?

CLAYTON: There certainly regulatory arbitrage. But what -- you're making a great point because this was -- this was a largely unregulated space across the world. And now what you're seeing is each country taking a perspective, a view, action, et cetera, which also goes to how functional is this asset class and how -- and how would we regulate it and how does it work?

There's a lot happening that is beyond the kind of understanding of your average investor. How -- how would you know, how...

PURDUE: So how can we in two agencies here -- I understand there's interaction between all of our regulatory agencies, but there's also another axis here that you have to coordinate and that's the other country regulators as well.

CLAYTON: Correct.

PURDUE: So I'm asking both of you what are you seeing and what are you anticipating we need to do to make sure either legislatively or rulemaking to combat that?

GIANCARLO: I'd just identify two areas of arbitrage we're seeing. One is regulatory, which I want to come to. But actually, we're also seeing price arbitrage as well. There's something known as the kimchi premium for Bitcoin traded in South Korea, because there's so much interest there that it drives the price up there slightly higher. So price arbitrage.

But you know, in the early days of mini-markets, every American city had a cotton exchange and the prices were different there before you developed a national market. So here, we have different regional and international markets and -- and perhaps, as this market matures -- if it matures -- a singular price may develop. In terms of regulation, there's -- unfortunately, I think that some time ago, perhaps middle of last year, there was this perception that Bitcoin was off the regulatory grid.

And one of the things that -- that Chairman Clayton and I have been working so hard to do is to dispute that notion. Now, we are limited in our regulatory authority to set regulatory standards on these online platforms. But when it comes to enforcement, when it comes to ICO's, we're using our full authority to drive the message.

And other countries are doing that as well. And we've had frequent conversations, I spoke recently -- or had communication recently with the head of the Japan Financial Service Agency about some things that were going on there.

Jay Clayton spoke very eloquently at the FSB meeting in Basel Switzerland. We are beginning our communication with other regulators and I think the message is getting through that this is not off the grid. And I think part of that is now you're seeing it in the Bitcoin price. As the word is getting out that we will go after misconduct, I think you're starting to see that reflected in the price and I think that's an important step.

PERDUE: I'd like both of you to respond to the pump and dump efforts that are underway right now. You see this beginning to develop. Can you both address what your agencies are doing to combat that?

CLAYTON: This is one of the things that I'm worried that investors don't understand, which when you have an unregulated exchange, the ability to manipulate prices goes up significantly. And, you know, just a few coordinated sales can change your price.

PERDUE: Or an e-mail -- or a fraudulent e-mail.

CLAYTON: Yes.

GIANCARLO: I had mentioned we formed this virtual currency enforcement task force. I mean, we've got some really good people on this. And we've brought three actions in the last few weeks. I said there are more to come, there are more to come. We are digging deep and learning a lot, and seeing a lot, and I -- I don't want to get ahead of that, other than to say that we are -- we are working the beat hard right now.

PERDUE: And you have jurisdictional right to do that, right?

GIANCARLO: We have enforcement jurisdiction, yes, we do.

SENATOR DONNELLY (D-IN): Now that the SEC and the CFTC have asserted jurisdiction and warned the public of the risks posed by virtual currency operators, what other ways can your agencies prevent retail investors from falling victim to fraud and manipulation?

GIANCARLO: Earlier, Ranking Member Brown mentioned, "What do we do with the CFPB?" We've actually formed a partnership with the CFPB to consumer education in the area of Bitcoin.

One of the things I've learned recently is that America's libraries are a place where a lot of people go and research Bitcoin, in fact they use the library computers. One of the most frequently searched items from a library computer is Bitcoin. And so, we're teaming up with CFPB to go out to America's libraries, to educate librarians who often get some of the questions asked, to be able to direct library patrons to use our resources, our Bitcoin website and our other resources.

So we are really getting very creative in the area of consumer education. I've mentioned we've got several podcasts on the subject, which have thousands of downloads. We are working as hard as we've ever worked. We've never done as much work on consumer education as we've done with virtual currency.

CLAYTON: We also have an office of investor education that has been engaged with a number of groups on this. And I think they've done a terrific job getting the word out. In terms of like getting the word out though, there are financial intermediaries and other actors that we're counting on to act responsibly in this area.

DONNELLY: Are you concerned that retail investors will remain vulnerable to fraudulent and manipulative online solicitations that are sometimes more difficult for you guys to pick up?

GIANCARLO: Senator, in the broad range of marketplaces, seniors seem to be the choice -- the prey of choice for fraudsters and manipulators, whether it's in precious metals, whether it's in foreign exchange, whether it's in a whole range of products, we see and we prosecute continuously fraudsters who will seek to prey on either the less sophisticated seniors who maybe have -- don't quite have the retirement nest egg that they believe they need and fall prey to get rich quick schemes or schemes that say we'll guarantee 100 percent returns and all kinds of nonsense like that.

DONNELLY: Let me ask you this. And this goes to perspective and to hopes and dreams. But what warnings would you give? There was an article in the Washington Post yesterday. And it was about good, hard-working Americans, people who have worked really hard and want to have a pension. It was about a group of our friends and neighbors from Kentucky.

And the title of the article was, "Bitcoin is my potential pension." What would you -- what would you say to them to help protect them from winding up in a situation a few years from now where it didn't quite work out the way they were hoping?

GIANCARLO: It such a troubling development, Senator, unquestionably. Which is why we're putting out so -- so much materials. But what I would say to them is it's the same advice I give my children. If it sounds too good to be true, it is. If they're promising ridiculous returns, they're ridiculous. If you are going to give them money, you'd better be prepared to lose it. Yes.

CLAYTON: I agree with everything that the Chairman Giancarlo said. I also would say this to them, which is there are things like disruptive technologies that come along. But they shouldn't disrupt the way you look at markets, for us, or the way you look at investing. Pumping all of your money into a disruptive technology has a very high likelihood of not working out for you as an individual.

When we see disruptive technologies come along, you know, there are -- there will be winners, but there will be many losers. That's the way it works.

DONNELLY: Let me ask you one other question. How can both of you best assist law enforcement and federal authorities to ensure these virtual currencies are not used by terrorist groups or nations like North Korea to evade sanctions?

GIANCARLO: So we work very closely with law enforcement. We recently commenced a program with the FBI where we actually have FBI agents on assignment with our agency in order to look at this. At the end of the day, the use of these cash markets for that, it's going to require cooperation amongst multiple agencies, especially with FinCEN, who often, because of their anti-money laundering operation, may see some of these issues before we can.

And then bring our expertise to bear and coordinate with our law enforcement agencies.

CLAYTON: Same here. I would supplement that with we also have a -- a dark web working group that tries to monitor what's going on in that space in order to identify these types of issues.

SENATOR KENNEDY (R-LA): Chairman Giancarlo, when is the last time you bought a stock exchange traded fund, mutual fund or a bond?

GIANCARLO: Well, probably before I started at the commission.

KENNEDY: Two years ago?

GIANCARLO: Yes.

KENNEDY: OK. When you bought it what'd you buy, equity or bond?

GIANCARLO: Index funds, mostly.

KENNEDY: Index funds? OK. When you bought it, did you sit down and read the prospectus for the index fund?

GIANCARLO: Well I'm not supposed to say this as a lawyer. I'm not supposed to say that I probably didn't read it cover to cover, but I will confess that I didn't read it cover to cover.

KENNEDY: How many investors do you think do that, don't read it?

GIANCARLO: I think most.

KENNEDY: OK. So what's the point? I mean, we're talking about all the dangers and the risks of cryptocurrencies, like Bitcoin. I'm putting aside the shyster fraud issue. I mean, what's the point of all this over disclosure if nobody's reading it?

GIANCARLO: I'll say historically, it's been one of the foundational principles of our securities laws, that adequacy of disclosure or full disclosure is one of the building blocks. I will tell you, having been in business that most business people will tell you it's that they study the prospectus only to see what they can sue on, if they need to sue on something if something goes wrong.

KENNEDY: I think you see where I'm going. I'm going to ask you both a philosophical question in a second about how far you think we ought to go to protect people from themselves. But I don't think the disclosure we have right now works. I think it -- it -- it's good for the lawyers and it is good for the financial advisors.

How far do you think we ought to go here in terms of a cryptocurrency? I'm separating this from the blockchain technology. I mean, China outlawed it. So I think South Korea is too. What are you suggesting, that we just go after the shysters and fully disclose, I mean, is that what you think we ought to do?

CLAYTON: I think that is exactly the question we're here to -- we're here to pose and take forward, which is, you know, what is the right way to deal with this new technology? I'm not, as just a person watching it, I'm not satisfied when I see people thinking that these trading platforms of cryptocurrencies have the same kind of protections that a stock exchange would. And I'm very unhappy that people are conducting ICOs like public offerings of stock, when they should know that they should be following the private placement rules unless they're registering with us.

Those two things make me unhappy. Figuring out how to deal with them is why we're here. I agree with you that we should be careful not to go too far. But for me, in the -- just to be clear -- for me, in this ICO space, it's pretty clear that when people are violating our securities laws work pretty well. Disclosure can be improved. It can really be improved.

SENATOR WARNER (D-VA): I usually agree with my friend from Louisiana. I think we may be on top of something that is transformational. And I don't think you can separate the underlying distributed ledger or blockchain from some of these crypto-assets. And if we looked -- if we had the same rate of increase that we've -- the next two years that we've had the last couple years -- we're talking now a couple hundred billion -- we'd be at north of \$20 trillion caught up in this area by 2020.

We've talked about some of the consumer protection issues, but we got money laundering issues, we've got cyber security issues, a third of the Bitcoin exchanges have been cyber hacked between '09 and 2015. I'm not exactly sure what the right regime ought to be. But I would argue that -- while I commend the treasury secretary for putting a working group together, I would argue this is the reason we created FSOC in the first place, that this rises potentially to the level of a systemically relevant event and I'd just be curious whether you believe this ought to elevate to an FSOC level analysis?

CLAYTON: So Senator, I had the same question you had, which is there's a -- there's a big rise here. If it does keep going, you know, is this a systemic issue? Which is one of the reasons we brought it up at FSOC, talked about at FSOC -- I, again, commend the treasury secretary for forming the working group. I want to go back to separating ICOs and cryptocurrencies. ICOs that are securities offerings, we should regulate them like we regulate securities offerings. End of story.

GIANCARLO: On the issue of disclosure, sometimes what we're seeing is not a problem of absence of disclosure, it's false disclosure. False disclosure is often fraud and I think we need to step in there.

But just in terms of discussion, we have begun discussions at FSOC. In addition, there've also been discussions led by Chairman Clayton at the financial stability board and also at IOSCO, which is the International Organization of Securities Commissioners. So these discussions are taking place at the right levels of debate, but there's so much more to be done.

WARNER: But we're focused on a lot on Bitcoin and crypto-assets, cryptocurrencies and I think there's even definitional issues here. But you've got a whole new platform called Ethereum, where they're creating, you know, file sharing or extra computer time.

I'm not sure what kind of assets those fall into. Are they potentially regulated within your realm? Or, if there was a trade -- a trading exchange, a tokenization exchange, between excess computer time?

CLAYTON: I believe the people who wrote the 34 Act and the 33 Act were very smart. They did it on a principled basis. They basically said if you're giving people money in exchange for a future development of a business with the hope of a return, and whether that return comes in the form of server time, or your ability to sell server time, it's a security.

WARNER: But there have been -- and I concur with the approach you've taken in terms of the ICOs, and I think there has been some very bad behavior, yet certain ICOs the SEC has not stopped, others they have stopped. And are you going to go back and re-review the ones that have gone forward?

CLAYTON: Let me say another thing about the 33 and 34 Act. When they were written, there was a great recognition that there was a tremendous amount of securities activity in this country, and that we were going to rely on gatekeepers to help us enforce those, and liability to help us enforce those rules; accountants, lawyers, underwriters, sellers and the like. I'm counting on those people to do their job, and I've made that clear.

WARNER: Let me ask, Chairman Giancarlo, what we did -- and one of the things I'm concerned about was that we -- I think we may have moved too fast on allowing, for example, futures trading on Bitcoin.

And I would just wonder -- you know, you've allowed future trading contracts on Bitcoin, yet we've -- the SEC has not allowed ETFs -- I'm just worried that we need a much more coordinated effort, because I think the potential, writ large amongst crypto-assets and the underlying blockchain, could be as transformational as wireless was years ago. And I think we're going to need a much more coordinated effort.

GIANCARLO: I believe it is critically important that we coordinate on this. I believe that we are all both individually and collectively understanding our authorities, understanding this new technology working around it. There was a communication amongst myself, Chairman Clayton, the Treasury Secretary, and others, in connection with Bitcoin Futures.

And, you know, Bitcoin Futures have done -- are quite different than the Bitcoin market. The -- Bitcoin is an anonymous area. Bitcoin Futures is fully transparent to the regulator. Bitcoin retail; Bitcoin Futures, mostly institutional and high net worth -- Bitcoin Futures' regulated. Bitcoin Futures' regulated. Bitcoin unregulated. And with Bitcoin Futures, we're now having visibility into underlined spot markets and data from those markets we would not otherwise have.

CLAYTON: Completely agree on coordination. I break it down into three areas. There's this great technology that, I agree with you, has promise. There are these pure cryptocurrencies which we need to -- we need to take a look at across FinCEN, Treasury, CFTC, Fed. And then there are securities offerings that are called ICOs that should be undertaken as securities offerings consistent with our regulatory regime.

SENATOR COTTON (R-AR): I want to continue on the line of questioning that Senator Warner began. So putting aside Bitcoin or other kinds of cryptocurrencies that are based on blockchain or distributed ledger technology, what are your thoughts on the potential value of that underlying technology of blockchain and distributive ledger technology both to enterprises, and consumers, and perhaps to government agencies?

GIANCARLO: It's important to remember that if there were no Bitcoin, there would be no distributed ledger technology. It grew out of that technology initiative. In the application -- potential applications -- and, by the way, I'm no pie in the sky dreamer. I just report what I read.

The applications range from enormous potential in financial services industry and the banking industry, but right down to the way charity dollars are spent, the way perhaps refugees are accounted for across the globe. There was an article just this morning about the use of distributed ledger technology for 2.5 billion around the world who don't have access to banking services.

One of the areas that -- in our own area of agriculture futures -- 66 million tons of American soybeans were just handled through a blockchain transaction, by the Dreyfus Company, for sale to China. So Bitcoin is now being used. It's used in our American transportation and logistics system.

And most importantly, the potential of distributed ledger technology for regulators to be able to really close market surveillance -- and, if it had been available in 2008, if we had been able to see the counterparty credit exposure of one bank to another bank in real time with precision, that would enabled much more precise policy choices that had to be made in a rush without good data.

So I think distributed ledger technology's got enormous potential. Now, how it will be realized, when it will be realized, what are the other challenges in it? Those, we can't say but the potential seems extraordinary.

CLAYTON: I agree that the potential seems very significant. And just look around anywhere in our economy where verification and recordkeeping has cost that is potentially reduced, is an opportunity for this technology. That's just one of them and I -- I hope people pursue it vigorously.

COTTON: Thank you. Let's turn our attention now to cryptocurrency and to Bitcoin since it's the most prominent. Yesterday, the Dow Jones had its single largest decline in a point scale, 4.6 percent -- as a percent, which is high, not the highest ever. That obviously generated a lot of news coverage. The dollar has faced two percent inflation or less now, for many years.

Bitcoin, however, has seen a 32,000 percent increase in its value over the last five years. It's declined by some 60 percent, I think, in the -- just the last 30 days. What are the factors driving that kind of extreme price volatility in Bitcoin, relative to securities of public traded companies or the U.S. dollar?

GIANCARLO: Well just recently the volatility you've seen in Bitcoin was not as large as volatility we've seen in some other asset classes such as the VIX product, which is known as the fear index, the volatility gauge. And so, we have seen extraordinary volatility in Bitcoin but, you know, in -- in our world, in -- in the commodity derivatives, we're used to volatility in asset classes. And that's one of the things that the emergence of a futures product is meant to is to provide those who are exposed to that volatility a means of hedging and mitigating the risk to that volatility.

CLAYTON: I don't really know what's driving the volatility in Bitcoin and cryptocurrencies. They're not correlated with sovereign currencies. So it must be something different from what would drive the dollar. But that's one of -- that's one of the issues before us, is there does appear to be a lot of volatility compared to the medium they are supposed to be a substitute for.

COTTON: So what does that kind of volatility portend for a cryptocurrency's future as a potential alternative to legal tender of nation-states, or in the E.U.'s case, a transnational organization?

CLAYTON: You raise a great point. Now, maybe that volatility tamps down to a -- to a stable. But an asset that is highly volatile is not a very effective means of exchange because you don't know how much you're getting by the time you receive it or how much you're paying at the time you have to pay it. If you agree price on day one but have to source it on day 10, you expose yourself to significant risk.

SENATOR MENENDEZ (D-NJ): I have been actively following both Venezuela and Russia's interest in developing virtual currencies for the purposes of evading U.S. sanctions. Last month, I sent a letter to Secretary Mnuchin on the subject and I asked Undersecretary Mandelker about this a few weeks ago when she was here before the committee.

Under what circumstances would the SEC and the CFTC have a role in engaging or regulating the proposed new petro or cryptoruble currencies? More broadly, does the SEC and CFTC have a role to play in preventing the use of digital currencies by foreign governments to evade U.S. sanctions?

GIANCARLO: Our jurisdiction would be very limited in that area, Senator. We haven't -- as I've spoken about before, we do have enforcement authority for fraud and manipulation. And so if we thought that that instrument was being used for fraudulent purposes, manipulation purposes, we would not hesitate to take authority. But this, you -- you're probably touching on an area where the -- the jurisdictional lapse is probably greatest for the -- for the two agencies sitting before you today.

MENENDEZ: What if you're manipulating to avoid U.S. sanctions?

GIANCARLO: You know, I'd have to speak to our enforcement counsel to see how that fits in. But we would certainly look at it and if...

MENENDEZ: I'd like to have you do so and I would love to hear back through the committee. Are you interacting with FinCEN to the extent that you may have limited jurisdiction or are you adequately integrated into the financial regulatory network that watches for illicit activities or are there gaps that could create vulnerabilities.

GIANCARLO: Yes. So as we mentioned before, Senator, Chairman Clayton and I are part of a virtual currency task force that has been put together by the treasury secretary that includes the Fed and FinCEN. And we have already had our first meeting and beginning meeting to set out some work streams.

We will have more to come. And it just so happens that I'm actually meeting with FinCEN's virtual currency team this week on a previously scheduled meeting to get some introductory discussions started that we -- of cooperation between our agencies. And so I look forward to actually asking them this question as well.

MENENDEZ: I would just say it to both of you, to the extent that you have a role to play and you lack the present authorities to do so, I would -- I would love to know about that, if you determine that it is necessary.

Because I get a -- my sense of cryptocurrency is largely driven to evade U.S. sanctions and to undermine sovereign currencies. Both of them are a challenge to the national interests of the United States.

We've seen a dramatic increase in the number of initial coin offerings where private companies are using digital tokens to raise money instead of going through the capital markets. The Wall Street Journal reported that the initial coin offerings grew from about 96 million in 2016 to over 4 billion in 2017.

Many of these ICOs are relying on celebrity promoters to gin up the sales, for example. Last year, Floyd Mayweather, the boxer, used Instagram to promote the purchase of Centra Tokens.

Now, I've done extensive work on consumer protections in the prepaid card space, where we've seen celebrities like the Kardashians use their status to sell products that come at a steep cost to consumers, and this feels eerily similar to that, just the next avenue of exploitation. And I worry about unsuspecting investors that don't have the resources to understand the true risk.

What can the SEC do to better protect investors who may be persuaded by celebrity promoters to purchase tokens offered at initial point offerings without fully understanding the risks?

CLAYTON: Senator, I'm not going to comment on a specific instance, but some time ago, we put out an alert that said if you are promoting securities, you're taking on securities' law liability. I believe that that has tamped down some of this endorsement activity. I will say it again right here. If you are promoting securities, you're potentially taking on securities' law liability.

MENENDEZ: Can you walk us through why the SEC at this point is not comfortable with approving ETFs with significant investments in cryptocurrencies?

CLAYTON: Our ETF products space is largely a retail product space, and we've made it clear to the marketplace that there are a couple of issues with having an ETF that's based on a cryptocurrency. They go to price discovery, custody, and some other issues around volatility.

We've let the industry know that those are issues that are of concern to us, and that we don't want to approve an ETF product with a cryptocurrency underlier until we can get comfortable with those issues.

SENATOR MORAN (R-KS): Let me first start by suggesting to you that if you have suggestions, I will probably not have the chance to see you in the Financial Services Appropriations Subcommittee before we take a look at F.Y. '19. Assuming that we're successful in the next few days on F.Y. '18 and budget caps, we'll have an opportunity to reconsider spending levels for F.Y. '18.

You've made your request through the budgetary process and appearance before our subcommittee, but if there are priorities in which, as we go back to potentially increase funding in any level of jurisdiction within FSGG, I would welcome your input as to what it is -- the highest priority.

I heard the commentary earlier, the -- in regard to one of the questions, I think, to Senator Reed was, the hiring freeze has created challenges, I don't know that we can overcome that.

But if is personnel in any particular way or other things, It'd be useful for me to know.

CLAYTON: Thank you very much. I didn't want to get ahead of the process, and our F.Y. '19 requests reflects the sentiment I've expressed today.

MORAN: I don't know that we'll see the F.Y. '19 request before we are taking a look at the potential increase in funding for F.Y. '18 depending on when the President's budget is released. But I would offer that it doesn't need to be today if there's any suggestions you'd like to convey to me.

You indicated why you were reluctant or unwilling at the moment to approve an ETF proposal.

But doesn't ETFs, just as options do on its exchange, reduced the -- mitigate the concerns, reduce the volatility, and increase price discovery, and reduce risk?

Don't additional products help alleviate some of the challenges we face? Or is Bitcoin or cryptocurrency so unique that it's different than other items that are traded on exchanges?

CLAYTON: Yes, I think that the CFTC product has that effect, it's largely an intuitional product, and you can take both sides of the market and, you know, it gives people a chance.

ETFs, you can take both sides of an ETF but predominately they're offered for a long investor, someone who wants exposure to the rise and fall of Bitcoin or other currencies, just as it would.

And that's a different dynamic than a futures product. And we've long taken an investor protection view of approving those types of products, which is embodied in our liquidity, custody, and pricing rules. If we get comfortable with those rules, then we can move forward.

MORAN: One of the things that I've tried to pay attention to and often in cooperation with the Senator from New Mexico, Senator Udall, is trying to modernize our I.T. system, particularly within the Federal Government.

And you indicated, Chairman Clayton, about the \$500 million loss in a Japanese cryptocurrency in your -- in your written testimony. We've now passed, as part of the National Defense Authorization bill, what's been labeled as MGT Act, it's the Modernizing Government Technology. And what it does is create a fund for federal agencies to rid themselves of their legacy technologies and have access to dollars to replace that legacy.

It encourages moving to the cloud, again, with the opportunities for us to have better technologies and safer technology systems to reduce our vulnerabilities. I just would encourage you have a lot at risk in the safety and security of the data that you hold. And I'd

welcome your reassurances that, I'm sure you'll tell me that you're spending many millions of dollars, and working diligently, and you have the right personnel in place.

But I would guess if we ask agencies of the Federal Government who have been hacked themselves and whose data has been released, they would have told us the same thing prior to that occurring to them.

I'd be first of all, delighted to be reassured that we will not be reading in tomorrow's paper or next month's papers that there's been a hack at CFTC or SEC. And then secondly, I just would offer you the opportunity to take a look at that legislation and see how it might be of benefit to your agencies and to suggest any ideas that you would have for what Congress can do to further strengthen cyber security within your worlds.

SENATOR CORTEZ MASTO (D-NV): I understand that companies that originated outside the cryptocurrency space, like Kodak and Burger King have recently jumped into the cryptocurrency space. However, some critics have warned that companies are using blockchain as an opportunistic venture to pump up stock prices without having a clear business plan. One company, Long Island Iced Tea, I understand changed its name to Long Blockchain and watched its stock soar.

So are you concerned that companies may be utilizing blockchain as a scheme to pump up their stock prices. And I'm going to just open it up to both of you.

CLAYTON: The short answer is yes. The longer answer is I've put out a warning in this space, and I've put out a warning to securities lawyers as well, which is nobody should think it's OK to change your name to something that involves blockchain when you have no real underlying blockchain business plan and try to sell securities based on the hype around blockchain.

We put out and it's on the SEC website, I made a speech regarding this, but this is an area of concern to us. Anytime there's something new that people seek to raise the value of their securities without the underlying goods being there it's problematic.

GIANCARLO: Thank you, Senator. So as you know, the jurisdiction of the CFTC and the SEC is slightly different in this regard. And so Chairman Clayton is rightfully concerned with initial coin offerings that are misrepresenting the affiliation, whether it be with Kodak or otherwise.

We focus on fraud manipulation broadly in instruments where there is wild claims for them. And I mentioned earlier a case we recently brought on a Long Island firm called My Big Coin, which turned out to be My Big Con. There was nothing there. They were taking people's money and not investing in -- in anything other than their own jewelry and houses and fancy cars and this kind of thing.

We've been very aggressive in using our enforcement authority. We've recently brought three cases just this -- just last month alone. I've said there will be more. And we are looking into this and monitoring markets very carefully. We believe that our big task is bringing enforcement cases and letting people see that as well as consumer education, which I've also...

CORTEZ MASTO: It's also been reported that more than 3 million that coins have been stolen. That is 14 percent of the Bitcoins or one in seven Bitcoins stolen. And on January 26, Coincheck, a Japanese currency exchange was hacked. In minutes, \$430 million was lost to hackers. This follows another theft of more than \$500 million from another exchange, Mt. Gox.

If people put money into a stock or bond and it was stolen, they would have help. For example, the Federal Government's still trying to help investors recover the money stolen by Bernie Madoff. When virtual currencies are stolen by hackers, what can buyers do to get their money back, if anything?

CLAYTON: This is a very good point and it's one that we've emphasized in our investor alerts, that when you engage in investing online with an offshore entity, the chances that we can do anything practical to get your money back are very, very low.

GIANCARLO: In our futures market, for example, we have what we call system safeguards, requirements that futures exchanges have cyber protections in place and they adopt best practices. For these underlying spot markets which we don't regulate, we don't have the authority to require them to have cyber safeguards in place.

And, you know, a lot of these companies are young, they're startups, they're focused on putting what resources they have into developing their technology. And in the case of -- some of the cases you mentioned, what I understand was the cyber protections just weren't there.

Now I know that the JFSA has been aggressive on this. We've had some conversations with them. We've asked questions, what are they doing about it. But unfortunately, the theft has already happened.

And so, this is a problem. These underlying exchanges, while we do have enforcement authority, we don't have the same regulatory authority that we have in the markets that we oversee. That's our day job, as one of your colleagues mentioned earlier. And so, therefore, this is a gap.

CORTEZ MASTO: So it's the old axiom buyer beware. I mean, so around this space, a lot of education is important, I -- I would imagine, from all of the federal agencies to buyers so they know until something else can be done, which I think we're still trying to figure that out. I noticed my time is up. Thank you very much. Thank you.

SENATOR SHELBY (R-AL): I want to get in the area what's on a lot of people's minds today. And I know you don't control it, the stock market. You know, what goes up comes down, as we all know. And we don't know when, and so forth. Is this perhaps more than an ordinary correction, or do you have a judgment on that at all, Chairman Clayton?

CLAYTON: So your question is exactly the question I asked my staff and some of my colleagues across the Federal Government because we should be asking those questions. By this morning, there was nothing to indicate that any of our systems didn't function as they were expected to function yesterday. This was the largest volume since November 2016.

We have two types of limits. We have single stock limits and then we have market limits, the circuit breakers, neither one of those were hit in any great detail at the -- or any great detail. The single stock was nine. The circuit breakers didn't get hit.

So as I sit here today, there's nothing that came out of this that concerns me from a functioning standpoint. But days like yesterday, our job is to look at them.

SHELBY: From a regulatory standpoint, are you saying that you don't see anything amiss?

CLAYTON: Yes.

SHELBY: But what spooked the markets? Is it profit-taking, perhaps? Is it a whiff of, maybe inflation, out there? Because people that watch the markets and participate in the markets see that the Fed is beginning to raise interest rates dealing with price ability as they see it, and the Fed has information perhaps we don't have -- the economy's hot, unemployment's low, so forth.

CLAYTON: Well, I can't really say, because I-- you know, there are a lot of opinions on those things. I'm asking myself, "Is there anything that happened yesterday that gives me a different view of systemic risk than I had the day before?" And so far, no. But that's a question I ask myself almost every day.

SHELBY: Of course, we all know that when the market is going up, people are elated, and that's natural. When it's going down, some people profit, but not a lot of people are elated, is that fair?

CLAYTON: Fair.

GIANCARLO: I'm just smiling because -- just a recollection of a saying that a mentor of mine, who actually was my introduction into the financial markets, used to say. When I would ask him -- he was an old hand in the markets -- what drove the market up yesterday, or down? He'd say, "Oh, it was up? Oh, more people bought than sold. Oh, it was down? More people sold than bought."

And we laughed, but what he said to me, he said, you know, when you listen to the pundits and they say, "Well, the market was up yesterday because of this," that may have been why, or may have not been why, but the reporters or the -- or the pundit, needed a reason, so they pick something out, and that becomes the reason for the day.

And I'm -- I don't mean to be facetious, but the markets are very, very complex. Very, very complex.

And sometimes it's oversimplified, and you hear it on the news, you hear it by people that are stock pickers, and they say, "Well, it was because of this." Well, I don't know how anybody really knows.

Now, if there are fundamental moves, fundamental changes missed, that's where we have to do and I share Chairman Clayton's view, is our job is to look at the structural underpinnings and see whether there's anything that's not functioning.

See if the fundamentals are sound. So, you won't be surprised to know that we had a late night last night and early morning this morning, checking in with our exchanges to make sure that things are in order; making sure that the margin levels held; make sure there was no significant margin breaches. And I can say that the system held.

The system worked as it was designed to do, the margin levels worked as they were designed to work, and so the right systems, the right policies, are in place. But the markets are always evolving, always organic, and that's why we need to stay very close to them.

SHELBY: The market always corrects. The question is if this is a correction the market will correct itself and where we'll go from there. Is that fair?

GIANCARLO: Yes.

SENATOR WARREN (D-MA): I want to go back to virtual currency, and I want to ask about initial coin offerings, ICOs. Some ICOs raise money for legitimate companies, but others we know are just Ponzi schemes. And many of the investors in ICOs are just everyday Americans lured by aggressive marketing promising very high returns.

In fact, it is now so bad that Facebook recently banned all ads for virtual currency-related products and ICOs because there were so many, quote, "deceptive and misleading advertising" that targeted regular consumers.

So I just want to ask a little bit of question around how we make ICOs safer. Chairman Clayton, the SEC evidently recognized the risk, so it announced last summer that it would consider certain coins to be securities under the Securities Act, meaning that they have to be registered with the commission and comply with disclosure requirements.

In 2017, companies raised more than \$4 billion in ICOs. How many of those companies registered their ICO with the SEC?

CLAYTON: Not one.

WARREN: Not one. And as of today, how many companies have registered for upcoming ICOs?

CLAYTON: Not one.

WARREN: Not one. So we're still at zero. Can you just say a word about why that's so?

CLAYTON: Yes. I don't think the gatekeepers that we rely on to assist us in making sure our securities laws have done their job. We've made it clear what the law is. As I've said many times, there are thousands and thousands of private placements that go on every year in the U.S. We want them to go on. We want people to raise capital. But we want them to do it right.

WARREN: Right.

CLAYTON: What ICOs do is they take the disclosure-light benefits of a private placement and then add to it the public general solicitation and retail investor promise of a secondary market without registering with us. And folks somehow got comfortable that this was new and it was OK and it was not a security, it was just some other way to raise money. Well, I disagree with them.

WARREN: So it is not new, it is -- or it is new but it is not OK and it is not another way to raise money.

CLAYTON: Correct.

WARREN: Do I understand you to say it is a violation of the law?

CLAYTON: Yes.

WARREN: You know, registration really matters. When companies don't register their tokens as securities, they can hide information and the SEC does not have the information it needs to monitor this market.

CLAYTON: I'm perfectly happy for these people to do private placements, but do them right. Don't try and do it as a private placement but get all the benefits of a public...



WARREN: Well, good. So I -- should I take today as your sounding a warning bell for people... maybe they better pay a little closer attention to law or the SEC's going to pay closer attention to them?

CLAYTON: Yes. And it's not the first time, but I really appreciate the opportunity to do it today.

SENATOR CRAPO (R-ID): Thank you to our witnesses. We appreciate not only your testimony today, but the work that you are doing this critical area. I would ask you to get back to me on recommendations as you have -- as you refine your evaluation of our current financial legislative system and whether we need to provide further clarification from Congress. With that, this hearing is adjourned. Thank you.