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P R O C E E D I N G S

MR. RAJGOPAL: It's a privilege to be here with four diverse and perfect CEOs with a preview of what's going on in banking around the country. For the audience, please remember to submit your questions on Pigeonhole. Towards the end of the discussion, we will go to questions. They'll be received from all of you. Let's start with the macropicture in the economy. It's probably worth pausing for a second and going back 10 years.

In November 2008, the economy had suffered 10 straight months of job losses. We are obviously in a very different macroeconomic picture right now. Brian, as you look at the natural picture, what do you feel good about and what concerns you?

MR. MOYNIHAN: Well, I feel good that it's clear that the US and Soviet continue to spend at a faster period this year rather than last year. At the end of the day, US consumer economies are honest. A lot of what goes on in the US and frankly, around the world, is (inaudible). And so, that's a way to approach the businesses that move up, maybe not as fast as people might theorize it should even though it goes to

employers, they're growing fast as the point levels are at all times (inaudible), still very strong. You're seeing consumers spend their stakes on that. It's very helpful.

And then we go to the commercial side, and we all have a commercial banking or outfits. It's very competitive in a country that's very profitable. They are benefiting for the tax reform, which was needed. And they're sort of in a growth mode, but also this depends on the late cycle and the industry cycle. Is the cycle going to be longer, and all of this is debated by (inaudible) around tariffs and trade and stuff like that. So I think there's a growing business when it's all shaved down.

Specific numbers, credit, all that stuff, you don't see any of that, but that's the worry at the moment. We'll just have to see how it plays out. We're pretty confident. Our research team has the US going this year, just around 2.93 percent, next year around 2.7 percent. So it will slow down in their projections. The question is, that's still faster than it grew almost steadily in the last 10 years. So that's the good news and the bad news. If you want to write the book that's

slowing down as projected to happen, but if you want to write a book that's faster than the benefit was, that's there. So we hear about all of that macro in the U.S.

MR. RAJGOPAL: Great. Nandita, why don't we go to you for a view that we can know for sure that you see with your (inaudible)?

MS. BAKSHI: Thank you, Kausik. We are in the western part of the country as you know and we are seeing tremendous growth. We're helped of course by the tech center, being headquarters in San Francisco, but states like Arizona, Washington, Newton, all of those areas are doing very well. So we are pretty old also, and if you look at the trans, it's becoming major APIs, like it's cost of threats. Whether it's other assets like those. Those are all trending really well. Having said that, we are conscious of the fact that it's been a pretty long cycle. So, we are expecting a down turn and we are gearing up for it, but so far so good.

MR. RAJGOPAL: Now we'll hear from your vantage point of view.

MR. KING: Yes, sir. We come from the mid-Atlantic and southeast primarily. I would say overall the economy is good. In some conferences, it's very

hazardous. This conference is very hot. I travel around to all of my regions and sit down to lunches with corporate about how things are going, and there's an awful lot of compliment. They'll tell me if something special is going on in Washington and they'll complain about it, but when it comes right down to what it is, that seems to be very optimistic for our conference. Now, I suppose if we'd be talking long enough, we'll talk ourselves into some type of derangement. That seems to be what we do. But if you just talk to business people on the street, they hear that and it worries them a little bit. They're focus on business is doing very, very well.

MR. RAJGOPAL: Rene?

MR. JONES: Very similar. In terms of the consumer and on the commercial side, I think serving our commercial customers, we've got a higher stand worrying about growth for next year since 2009. So, that all went very well. We're in the northeast and we go now to the mid-Atlantic. And really what we see is sort of a scale of two markets. So if you look at the large areas like for us would be D.C., Baltimore, and then the real estate here in New York City, you've got great

population growth, since the time frame that you talked about, the last 10 years, we've seen about 14 percent growth and cumulative GDP in Washington for example. In Norfolk, Virginia we've seen about the same in terms of job creation.

But if you flip that and go to some of our rural markets, while things are healthy and the customers that are there are very healthy, they're not seeing the same level. So for example, over that same period, if you look at upstate New York or Pennsylvania would be very similar, that might be like three and a half growth or whatever period that might be. And if you look at job creation, it's actually negative five in some of these markets. I mention that not because it's negative about the economy, but I think we have to watch sort of as the political environment begins to change who's winning and who's not because those things tend to affect the point of the move, which of course affects us in a big way.

One thing I'll say about those urban markets, if you look at Buffalo, the amount of public/private partnership has produced growth that is on par with some of the larger cities. And it's quite interesting to see actually a rural area get this economic rejuvenation.

So it is possible to sort of get everybody where they need to be. But I think there's definitely a tale of two cities.

MR. RAJGOPAL: Any thoughts on the intrastate market?

MR. KING: I personally think that intrastate will continue to grow slowly. I think that it should continue to go up slowly. I think Chair Powell said we're not near equilibrium yet. One of the governments said there's a big check there today and one of them said we're almost at the neutral point. My only experience has been it's probably 150, 175 base points to go before intrastate becomes a big factor. People talk a lot about intrastate, but when business people get up in the morning, and until rates get to a pretty high level, that's not their primary consideration in terms of what is going to make the most money. There's many, many other things they have to think about. So until you get rates into the five, six percent range, it's not a determinant. So, we've got 150 and so base points to go before I believe it'll even become any factor at all. And I think before it becomes a (inaudible). So I think we'll see it very rated versus

next year and then a little bit the following year and then we'll begin to kind of place where they go to the sidelines.

MR. RAJGOPAL: Can you affirm a little bit of the market of our economists? I'm sure all economists say that the rate will go up because economists are trying to take the accommodations out because of the economy is resting. So I think that's pretty much everybody pays. In regard to the right reason and that's what (inaudible). They're not going up just because people are trying to push it. They're going up for the right reasons. The economy is going bad, and they'll pay accommodation. But I was thinking about this question today. How will we have to be working the last time the feds finally raised like four percent and five percent and you're starting to find 35 total? So it'll be interesting to see the process to our companies when you think there's a lot of people that have never seen a fed fund raise above 30 percent in their entire working career. So they're not two years in. They're 10, 12 years in now. So you start to see if they understand that this is not what we live through. It's abnormal. You're going back to more what you hope to be

and hope those economists are strong enough that if the fed funds raise above 30 percent, it would be achievable because that means we have enough growth to pack it. And I think it's hard to get people to think that question through because these are the lowest nominal rates. You can't punch (inaudible) and expect it to come out. You've got to go back to times when the day wasn't kept sustainably this low. And people are acting like oh my god, you're going up from one to two?

MR. MOYNIHAN: Great point. So we may need a generation that has set expectations on what is the normal market. And speaking of expectations, one of the things we see is customer expectations continue to rise. And for banks, customer expectations are increasingly set by their experiences, not just within the bank but online banking. Now I want to see people's views on this one, how do you see those expectations rising and what are you doing to respond?

MS. BAKSHI: That's a great question. So customer expectations are definitely rising. They are looking convenience right now. In fact we, and every bank reveals this, transactions are morphing from branches and going to mobile every day. And if you look

at it, customers want ease and convenience because they aren't getting that from the right share companies and Amazon's of the world. Five, seven years ago, we couldn't imagine ordering something and getting that the same day from Amazon.

So as constant consumers, they're saying, "Why can't we send and receive money immediately? What's wrong with that?" So I think the whole paradox has changed and I believe that we bankers have to change accordingly. And I'm very passionate about a customer experience. I'm sure the others are too. And for us, we pride with the customer is the center of it all. And we look at it and we try to respond in many, many different areas. I'll talk about three today.

The first one is investigative design. Historically, digital was all about functionality, content, who had better features. Those are commodities today. Today it's all about the experience. The battlefield has often to design organizations' content. And that is where customers are being (inaudible). So design then becomes extremely important because that's what customers look at is less friction and ease of use and onboarding and so on and so forth.

Connected to design is the need for the right people tact. Because this is a new breed of faith and Brian was just talking about us 35 plus or more, we are the ones that remember what it used to be. So I'm not sure I'm the right person to be designing those interactive sessions that we want for our customers. So it's very important then to hire the right people for the visuals, to hire folks, especially millennials who can come in and work those advantages. So workforce, hiring the right people, making sure we empower them, we inspire them, we retain them becomes extremely important. We talk about culture attracts people and they talk about mirrors retain people.

And the third area I would say, and probably the most important, is where we get feedback directly from them. And what do we do about it? How do we change our feature functionality, product design, product pricing, all of that based on customer experience and the feedback we get from them? I had basically appointed an individual lady that reports to me directly and takes care of the full enterprise customer experience.

That has made a huge, huge difference because

they understand how important it is. While she's not responsible for any one area, she is responsible for the whole enterprise. So it brings about huge changes. And lately, JD power scores had us at number one in California and number four in the country, so we're happy about that.

MR. RAJGOPAL: Kelly?

MR. KING: So when you're thinking about a lot of change, I think it's very important to establish perspective. You mentioned paradigm. So if you go back over 55, 60 years in this country, there's really been only one big time paradigm shift and that was coming out of World War II, there was a real demand in retail America for more convenience. And the thing about the problem with that, all retail America was right downtown. You had the hardware store, the post office, and the bank. And there was no parking and it was just what it was.

But all of a sudden, public started demanding more for the convenience of time. So retail America invented shopping centers. Banks went right along and said, "We'll go build a bank. There will be plenty of parking. In fact, we'll throw in a private window in

case it's raining and you want to come inside." And the public said, "Well, that's pretty good but on Friday night, we might want to get some money today to shop." So we said, "Fine, we'll put an ATM in the mall." They said, "Well, that's pretty neat, but we don't want to carry all of this cash, so we just want to give our debit card." Then they said, "We want to check our balances at home in the bedroom" so we gave them online banking. So we've been through all of these changes but it's all about one simple paradigm. Convenience.

And so, it's important to recognize what has changed and what has not. Now, until very recently, what did not change was the trusting relationship between the banker and the client. So as long as you reasonably meet the technological convenience requirements and you had a really good trusting relationship, you won the game. Now what's happening the last two or three years, and this is to the credit of Brian and some of the very largest of the banks, there's been a shift in the definition of quality, at least in my view.

Historically, quality was defined as technology in the back room and interpersonal

relationships in the front room. About three years ago, this shifted. And now, quality is defined as a function of technology in the back room of course, but more importantly to the client technology in the front room. And I still want that trusting relationship also. So it's gotten more complex. So now what you have to have is all of the technological requirements in the back room to be efficient, in the front room you need client demand, but you still have to have that interface when the client demands you. The final thing I'll say, and this is just the way I'm framed in my mind, over the last few years there's been this acceleration of this demand for convenience and it's what I call demand for real time satisfaction. Clients want it right here right now. They took the whole of mobile phone. Now we're all sprinting really, really fast to accommodate that and do a really good job of it. We can talk about later some of the pending issues around that or security issues, but this is all about changing the paradigm in order for convenience and it's important to remember that so we don't further (inaudible).

MR. RAJGOPAL: Thanks, Kelly. Rene, a part of the technology paradigm shifting is also the potential

for maxed use power of data to engage in personalized customer experiences. And you also value the role of that in utilizing customer experience.

MR. JONES: Yeah. Just to start off, I love Kelly's explanation of what the banking industry is going through because we've done a lot of inhibition which is generated from within. And I think a lot of talk about banks being behind and catching up was a matter of circumstance. We were in the crisis, we were building risk systems, we were doing all of those things. We're running at the time where the influence of six decades of the computer revolution, microprocessor for generations, broadband started to expand. It was a point where not only were we occupied with other things, but we had a reputation issue. And those two things combined were a big deal.

But when I look at it, I think we're incredibly positioned. So when you kind of get down to this idea of what's the importance of data, what's the importance of technology, I think the better question kind of goes to where Nandita was which is in other industries, they don't talk about those two things. They talk about technologists and data scientists.

There is no technology, there is no data without those two individuals on your team.

And what I think is going to be most instructive is that we're going to have to rethink the way we go about hiring help. And if you go all the way back to the crisis, why that was so important from a reputational standpoint was not only because we had a lower reputation with our customers, but with banks.

And my sentence is that we're going to have to do a much better job. So if you look at our shop, we have 1250 roughly technologists. As we look out to 2025, we will need to almost double that when you look at technologists, data scientists, customer experience individuals. So you can picture yourself trying to tackle a customer problem and you say, "Well this is great. I've got a team of 112 data scientists." Well the data scientists aren't any good without the other folks.

And if you think about it, for many, many years our entire institutions have been set up to develop and issue products as opposed to solving customers' needs. So as you begin to bring in a new talent, make it attractive, you also have to figure out

how to reform a way in which our bank office process of work, the way in which we approach innovation and collaboration.

So data is essential to it, but if you actually start to look at those teams, the teams are going to be what differentiates you. It's going to be what logic gets to the next innovation. They're just one part of the puzzle in my mind. So really, really important. We have a history of data being large amounts of investment to go from where we are, but to me, it's really about the teams and the talent.

MR. RAJGOPAL: Perfect. Brian, we've heard several mentions already of the need for real time satisfaction, real time experiences. The industry obviously is in the middle of much investment and activating a real time cadence. Talk a little bit about innovation and real time payments, and do you see that?

MR. MOYNIHAN: Well I think the theme has been drawing this or corroborating. And it's not a theory, it's not a question, it's what we're operating and stuff going back and forth and we're getting more and more people. But the question is why you need it. What you really need is a cash equivalent that has a finale of

cash, the convenience of cash and has a real time monetary exchange. The people know they're paying it and they know they're getting something. And that's a key element to it because the system can run as well and also have it available (inaudible). So I think we think this is a real next generation for the convenience. If you combine all this and think about it, it's redefining the deli's point, checking out the debit card at the ATM and getting cash out. Now you're just finding another way to access your real account and really pay for stuff where a person can get the value and hope they're getting the value of currency to pay it back. The problem is all of the other clearances we've had, there's been a delay. So somebody had to trust somebody that comes in and gives the Mastercard and there's no guarantees. And this allows the micropayments to take place. And so, you can't use any one of these, but the security element with the total modernization, all of the things going on, the convenience of it with the wallets involved, operationalize the real time nature of it and the movement. The POP and the Zelle and all the things, all of this works together against the convenience of customers, the security means of the

customer. And then frankly, on the other side, the biller's rust actually will catch. And at the end of the day, we still are spreading out 250 million dollars of the telephone every day, 250 million dollars out of the ATMs every day in "cash assigned." We're not so far away from this and yet, transaction volumes have gone done, the dollars are still going up. So this is for all of us. It's security and convenience of the customer, but for us it's cleaning up the rails and making an offer much more effectively. And don't forget that the fitness of (inaudible) would help us deal with a lot of these issues going on where we're caught in the middle or two people had an exchange that because of the mechanisms they're asking us to arbitrate it, we don't need it. We shouldn't be doing it. That's not our role. So I have high hopes for receiving operations for Jim, Russ, and the team were able to collect it. And this is something we had to do as an industry. It's a good vehicle to everybody. It has to have a network effect like Zelle, like everybody has to get it and by the way, we have to keep it free for customers. So there's no way we're going to charge for anything. Any ideas, we have to make it a core part. It's the technology

future. I think there was a session three or four years ago, and somebody said it, I'm not sure who it was, and they even bothered somebody like the vice president and I said, "This is just the check-in counter, isn't it?" He said yeah. I said, "Alright, guys let's go." And that was it. Three years later, we're here.

MR. RAJGOPAL: Wonderful. Let's broaden the aperture from real time payments and payment innovation to innovation more broadly. There is a lot of noise these days. We'd argue more noise than sitting on the lawn. We'd estimate within the last five years, nearly 60 billion dollars in investment has floated into space. At the same time, we see many of them struggling with challenges around customer acquisition. Without existing brands and distribution, and those with more balance sheets becomes the morals with customers. Rene, I'll start with you first on this one. As you think about fan tax, do you see them as competitors, partners, neither or both?

MR. JONES: I think my short answer is both. I think on the one hand, the banking app is well established, we've got tremendous amounts of scale, significant resources, and we're trying to figure out

how to get the convenience question into digital as a way of doing business. On the flip side, Fintex mastered that. And they have one key ingredient which is concealment. Going back to my earlier point. But they get to prove whether they have a scale. So in my mind, that's a bit of a marriage made in heaven possibly because I think if you were to take a closed roof on it, we in the industry say we have the best talent, and therefore we're going to produce all of the other ideas, I think that would be a death note. So part of our job is to sort of open ourselves up in a way where we can share the mutual benefits to make sure that the industry survives. Having said that, if I congregate myself back into the industry, I do believe we all spend the same statistics. We spend eight to 10 percent of our revenue on technology. We spend 20 to 40 percent of that on innovation and products and services. For a bank our size, spending your time and spending those dollars just to keep up is not a good idea. Our job, we really have to figure out how to differentiate ourselves. And what that means is that we can't afford to actually have large portions of our talent be outsourced. Because as we come up with those ideas, we have to to the best we

can actually retain that in that same talent pool. So that's one of the reasons why I look at it as both. We have to open ourselves up to it. When you do that, you also get the benefit of being an attractive place and an open place to be able to work. but I think internally, if we're going to see many more of the things we do outside actually came inside.

MR. RAJGOPAL: Brian, part of the incumbent bank response to Fintex has been technology innovation we run. Earlier this year, we launched a check bot and more generally, in that and beyond there's lots of talk about artificial intelligence, and to Kelly's point, maybe that's a big part of bringing technology to the front room is the back room. What do you see as the future of AI, particularly in banking? What are the kinds of experiences going to empower?

MR. MOYNIHAN: Well I think we were having this discussion with the management team yesterday. The word AI, we can make it this broad or this narrow depending how you view it. But to me, there's four or five technologies that we're trying to harness in the company, and I think all of us are, which is the capabilities of voice recognition have changed

dramatically. The capabilities of data extortion and retreat. The ability to store the data and access it. The ability to do temptations on it, what most people refer to as artificial intelligence, and a second set which is predictions and a second set which is the machine itself. But most importantly, it's the network that actually distributed both wired network and wireless. Because at the end of the day, something like Erica does not work if your network is so slow and your waitlist is so long.

So you have to have all of those things lined up. And then there's the customer-based application, mostly in term. Going back to Rene's point about data scientists, if I can articulate what I'm asking for, I want to know who restocks and came into the bank on Thursday, that can go all the way through and clear the machine and come back, I can save a lot of people. And that's not a very intellectual concept to it, but it is a data inquiry. It is a data scientist that would have to peruse the inquiry and stuff like that. So you can also have tremendous internal capacity and ration.

But a statement spreading would be reduced out of robotics on (inaudible) preparation whether it's

predictive modeling for other types, where we send sales forces and stuff like that, but it all comes back to parts and the finalist technology platform type of place and getting going. And so, we're learning a lot from the voice recognition, artificial intelligence. Because you can text it there. It's not necessarily doing it either way, but we're learning a lot, learning a lot about the customer.

We're feeding them insights about their talent. And it's right out there in terms of the activities, but there's three or four million people using it and we're learning from them. going to Rene's point about experimentation and the people using it are far into financial services, artificial intelligence development and what all it needs. But I think those four or five aspects of technology are compounding to change the nature of everything we do, both internally and externally.

And then if you put it against what Rene's point earlier about the ability of Alexa, Siri, etc. You have to keep up with it (inaudible) so to speak. You need to keep up and you need to make sure that if people can start talking to this phone and activating it

by talking and being able to compel a computing power in a supercomputer capacity, that's what they're going to expect out of you because they can do that with some other aspect of their life at warp speed and instantaneous and answering questions. We're going to have to do that in financial services.

So we're just pushing this out here. We're proud of it, it's working, but we think we still have a long way to go to learn from it. But at the end of the day, I think all of us are learning from this. It's those four or five compounding effects of those technology platforms. It's not artificial intelligence on its own. It's not data, it's not networks, it's not voice recognition, it's not machines. It's going to be all of those things. And then how do you use them to advance the customer experience and the employee experience is going to be the trick. And we're taking a bold approach in some cases and a lot of you know, just to speed things up, make things a little bit better and then figure out what goes on.

MR. RAJGOPAL: Please.

MR. KING: I just wanted to make this point briefly, I've been the most optimistic about our

industry than I have been my entire career. For much of my career, I feel like we've been on the defense. If you go back over 30, 40 years, we saw ourselves, the banking industry, substantially lose control of the lending business. When I first started, the banks in this country made about 80 percent of all the loans before prices went down to 30.

We saw ourselves getting substantially disobedient by the plenty market finds that (inaudible) or we ended up having to go a mile in the end of crisis. And we were on the cusp of losing (inaudible), but with the great work that Jim has done recently, I think we're reclaiming it. Honestly, the payment system, which is really huge. but there's a frontier that relates to this whole area of information and AI that is extremely safe and really, we are all in the business of information management.

We know more about our clients than anybody. Amazon knows a lot, but we know a lot more. And so if we can harness AI and other forms of learning and figure out ways to offer solutions not just around speed of convenience, which I alluded to, but around the quality of that movement of activity, which we can do. The

tools are there, the need is there today, there's nobody else that is more suited to hound that as much as us.

We waited a long time. Somebody will figure it out, Amazon or somebody. But for the first time to me, there is a huge new opportunity for us as an industry to forge a new primary anchor point with a client, and that is about helping them manage information they need in their life, doing it comfortably, conveniently, which security nobody can do that.

MR. MOYNIHAN: The thing about that, and that's quite honestly what Kelly said, you didn't say that Erica is telling people they're spending too much. That's just a real time budget management exercise. So if you go back generations ago, that would've been balancing your checkbook. You get a bunch of bankers and I guarantee none of their balances are done. So, the point is, it helps people manage real time. That is an entire good thought. We're not taking information and trying to sell it to somebody or use it, it's their information about them that we can analyze and compare to people who might look like they don't what they are but they're spending more than (inaudible) just like

MyFitnessPal will tell you you have more weight than people in your cohort and whatever. That real time intimacy that the technology enables you to have and the insight you have from the data and it has uses for the customer. I agree with Kelly. It gives you an extremely optimistic view of where this goes in the next decade for our industry as opposed to being part of the supplies along their expansion.

MR. RAJGOPAL: You won't touch Shaun in the rise of technologies and the employment of technology platforms. When you look at the technology center as an example, we see the rise of real large-scale players. And outside of the US, if we take Trenton as an example, even (inaudible), and that scale story seems to be playing out across different industries. So as you step back and think about it for banking, maybe we'll do a quick CEO round robin here starting with you Brian, what do you see as the role of scale in banking and the implications for banks of different sizes?

MR. MOHYIHAN: I think it's important because it gives us a chance to offer a convenience that the customer gets the benefit of. And I think it's appropriate for this room and these groups, but there's

a different scale we have at Bank of America on our own, the scale we share with the industry real time as a case. So we need to use a scale for the industry's benefit and an individual scale. If we're doing some cybersecurity scale with this, what would you do? So you go down all of these things. It is critically important. And I think actual institutions have to draw the scale equation with all credit to great the service providers of our time, it advise whether it's in the back office. Because right now, the aggregate of these institutions just in the clearing house is so much bigger than any third-party suppliers go that we have to think about how we help these people get up to speed or bill what we need as a utility. And that's one of the fun things I think. We've all gotten into it the last five to seven years with AWSL transformation, real time transformation. The scale is important, but how can we bring the scale together as a communal group and make it available to the entire industry? Really, that's the thing that we have a shaded view of the right thing to do for customer convenience, security, safety, trust, that I think will be better for the customers.

We firmly believe that. But sometimes we have to own that scale and sometimes we have to borrow that scale. Sometimes we have to trade that scale. And I think that's an interesting thing. And when we think of our banks as big banks, you've got to remember that we're in the second largest market capital of the world. we're the fifth largest in banking. JP is number one and Marquette is number two. You've got to remember the four charter banks are bigger than any of us and earn more than all of us. Those banks are huge, so it's going to be interesting over the next couple decades with what happens when there's a potentially large institution with one major shareholder. It'll be interesting to see how that plays out, so we've got to have some scale ready to go.

MR. RAJGOPAL: Thanks Brian.

MS. BAKHSHI: that's a great question. I agree with Brian in terms of creating the scale, how we as industry partners can get together to do that. Earlier today, I spoke to someone when asked who's your bank, they said Venmo. So talk about the Fintech being a competitor. But then talk about us coming together and coming up with a solution and reclaiming that space

as Kelly said with Zelle. But absolutely, I agree the scale can be created as we partner together with the leadership of ITCH. But then we, at Bank of the West, also enjoy a long-term scale. We are a part of the affiliate of the fifth largest bank in the world, not those Chinese banks of course by the government, and we have a front row seat as a result of watching a lot of things that are going on. Innovation, risk, cyber, different waves of management. So absolutely scale matters and that they need to create it or borrow it. In our case, we borrowed it.

MR. KING: Well, the scale is a big deal. I think it is changing pretty quickly. In terms of the backroom scale technology over the last few years, and Brian alluded to this, it depends on positive changes in terms of smaller banks being able to access through (inaudible) requirements, through shared utilities, through industry collaboration. And by the way, I want to congratulate Brian because you all wouldn't know this, but he has been a real leader in terms of post-market as an industry.

In terms of finding ways to communize and become more cost effective, so thank you Brian for that.

And there's a couple of the areas on the scale that is something we all need to be concerned about. And this is a pretty recent thing too. That is today sale and marketing is a (inaudible). As I said before, their definition of quality has changed, so quality is now defined by the client as just a personal relationship but a really big issue in terms of technology. But it's also changed in terms of their perceptions. And are perceptions are substantially financed by information that they perceive in the marketplace. And so, I give credits because the smaller banks today are putting billions and billions dollars very effectively into marketing. It can sway opinion and sway decisions and behavior.

So one of the challenges that all of us, and I would say have come to our size which is not that large, but we are the eight largest US Bank, maybe the challenges of a scale (inaudible) big issue. SO I think we can find ways on the backrooms with shared utilities, plug and plays to mitigate a somewhat defective scale, but this marketing scale issue is something every one of us needs to find a way to tackle and my humble opinion and answer for that is differentiation.

MR. RAJGOPAL: Thank you all for that inspirational round robin. I do have a few questions from the audience. Brian, we'll stay with you for the most popular question. you spoke eloquently about the opportunity for real time payments. We underline that by knowing that the US's foreseeable right for more checks than the next 50 countries in line. The audience question is what is the biggest competitor that you see to the adoption of real time payments here in the US?

MR. MOYNIHAN: It all comes down to age. It's literally getting people to change and that takes time and (inaudible) tipping point. So if you analogize something like deposits, we deposit an ATM while I was in high school. Come out four years later and we have half the checks in ATM, 25 percent to the mobile phone in over six years. So the pace has changed but it still takes that change to happen. You still make 25 percent. So I think the real time will have the same analogy. So we're seeing Zelle take off and grow 100 percent a year and becoming interesting numbers, when you sort it out as a percentage of all payments made, it's low. So we had to be patient in real time. It'll take getting people to understand how it would work for them and how

it will help them in terms of their day to day life in terms of paying people. The idea is it can be any amount, any time initiated. All of these things we've been theorizing about is a way you can pay a gym membership and you actually have to check to make sure it's paid. Yet, when you stand in front of a person, you can give it to them. I think that's great, but I think the issue is getting customers to understand ultimately how you use it. And that's going to get them on the receiver side, plus a person or merchant on the second side whether it's consumer or the business coming together. It's always an option. You just have to be patient and let it build. Business to business, it'll happen instantaneously. Anything that speeds up how fast I get my money is easy to explain to people. Consumer is just hard. We have a million people out there we've got to get to understand the change and that's going to take some time.

MR. RAJGOPAL: Thanks Brian. Kelly, we're going to you on this next question. Is the growing consumer consensus to be a privacy threat or an opportunity for banking?

MR. KING: It's a huge opportunity. I am so

excited that the consumer is getting concerned about privacy. I think for a number of years we were heading down a dangerous path putting everything there is in the world to know about each other on every web page we could possibly put. And I think the consumer has got to get a bit more savvy about the risk with regard to getting information out in the public space. We do the best we can do in terms of managing the privacy, but ultimately it's the responsibility of the consumer. We have to do a better job at helping the consumer understand the risk and then what we can do to mitigate the risk and help them share with us the responsibility of proving that kind of information. Ultimately, we want to make the world a better place to live. We want people to be able to be as open as they want to be and that's the healthiest thing from the overall culture of the world. But it can lose itself just like that if we end up with so much privacy concerns and privacy risk and infractions that people go anywhere and would go the other way. So it's a great opportunity for us to help educate and to continue to build (inaudible) our system. I'm proud of our industry. I think we are bleak in terms of providing that type of (inaudible).

MR. JONES: I agree. It's a huge advantage. I think we're running at a turning point just looking at the events that have happened over Facebook and some of the other providers of information. They couldn't be clearer, broader examples or better educate the entire public of the concern. I think what makes me optimistic for the banking industry is that all we are is our cultures that we built. We've been built based on being very attentive to risks. And some of the new cultures that are out there have been very attentive to a very good thing which is transparency and openness but have not exercised the muscles around the other risk. The more ways we can find to help our customers, the better our reputation is, the better our purpose is.

MR. RAJGOPAL: Rene, I'll stay with you on this next one and then Nandita, I'd love to get your thoughts on this as well. Rene, you spoke earlier about the tale of two regions. Question from the audience is what financial technologies or innovations are you thinking about that will better serve the bank?

MR. JONES: I think one of the most constructive things if you think about what we talked about today is if you look at what's happening at places

like Square, we have presumed there are certain segments that we just can't bank. And stumbling into a merchant exercise, they've realized by looking at data, there are actually different ways that are non-traditional ways to begin to think about getting paid back.

MS. BAKHSHI: Yeah, I would say that it's a huge opportunity for us. At any given point in time, a third of the US population is at a bank. And if you talk to them, most of them would say they're intimidated by banks. So we have created that barrier somewhere, somehow. And I would say I'm very proud of Bank of the West. Years ago before I got here, we actually gone into a partnership with a community organization called Operation Hope and we innovated it. We started it and essentially what we have is individuals prompt the operation of Hope organization imbedded within our branches. So I know that has spread quite a bit, but I'm very proud of the fact that Bank of the West got to offer that first. And it's outreach and it's technology. With the mobile phones in the hands of practically every adult in this country, banking services are just a few clicks away. It's a question of having the right product set, having the right

structure, having the right outreach, having the right education to bring that in the fold of banking.

MR. RAJGOPAL: Well said. We're almost out of time. Brian, we opened with a macro question, so why don't we close with a macro question to you? question from the audience, this morning sessions' talk about the beneficial impact of technology in the financial sector, in the overall economy however, productivity remains low. Why is this and how can we improve?

MR. MOYNIHAN: It was a wise person who said to me who knows far more about this (inaudible), said we'll figure it out in 25 years. And the measures and stuff changed. I think it's a real struggle of how to find productivity and the construct of what's going on in society. So in all seriousness, and this was a person who knows far more than probably anyone combined on economics, things like that. We've got be careful about looking for micro wounds.

The reality is, we had society figure out the question of the impact of technology over time on labor and people and how it enhances their life. And at the same time, how do we make sure we mitigate the effects of it. We spend a lot of time in our company thinking

about how we change the company over time, how we are playing far in the future and how we try to mitigate those impacts. But I think to come up with the productivity conundrum from a monetary policy, co-economics, I personally (inaudible), well that isn't how you measure what really goes on. So I think it'll take a while to figure out the different measurement systems. That is across the board and those are real companies. So I can't quite figure out the productivity when you go to a company and they say no, we have 10 people doing what 12 people can do. We have some sort of robotics and I'm not sure of the equation, but the broader side of the question is long-term from 50 years ago to today is quite so many people working. It's down about 40 percent of manufacturing jobs. 75, 80 million jobs came in all around services.

So in that area of (inaudible), we create 75 million more people working across 40 years. It's (inaudible). So the idea is this may take care of stuff, but we have to help see it and make sure it happens. And (inaudible) isn't worried about trying to debate whether we have productivity of 0.1 or 0.2 quarter to quarter. The question is long-term how do

the impacts of technology of labor on people.

MR. RAJGOPAL: Thank you Brian. And thank you Nandita, Kelly, and Rene for a wonderful encounter and what a provocative and inspiring hour.

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