Please stand by for realtime captions.

 >> Good afternoon , I am Tracy Wade . I will go over logistics. This befit is being recorded.

 The link for close captioning will be placed in the chat box at the bottom of the WebEx window. If you have any issues with your audio, press the audio button at the bottom of your screen, the audio options are located in the circled button with three dots. There, you will receive guidance on switching your audio. To adjust the way that you are viewing the WebEx click on the layout box at the bottom of the screen. There you can toggle between the different WebEx views . For technical support during this event, send a message in the chat box to the host and I will provide assistance. Now I will turn the event over to Acting Director David Uejio to Manny Mañón, for the Bureau's office of advisory councils.

Thank you Tracy, good afternoon everyone, I'd like to officially convene today's CFPB or ARC . I'd like to welcome all ARC members and members of the public's that are joining us today. Thank you for making time. My name is Manny Mañón,, I serve as the staff director for the advisory research Council Bureau. I'll be serving as a federal officer for this advisory community. As background, the CFPB has established advisory committees to supply analysis operational expertise, knowledge of our communities, and feedback to inform our areas work.

 The ARC is comprised of academic experts with diverse words of you.

 A full list of advisory committees are on our website at consumer finance.gov . As a reminder, the views of the members

 bring their views and they are greatly appreciated and welcomed, yet they do not represent the views of the Bureau. Now I would like to go over what you can expect for today's meeting.

Today's meeting will run from one p.m. and conclude at 415 p.m. Eastern time. We will start with remarks from the acting director are. Our first agenda item is emerging issues in analysis. The second hour item is 20 20 mortgage lending data. The final item is a discussion about research and partnerships . Following each session there will be time for Q&A, and discussion with advisory committee members and the staff. During the call we'll have 215 minute breaks. As a reminder to staff and advisory committee members, during the Q&A sessions, if you would like to make a,, please press the raised hand icon and research staff, or the ARC chair will call on you. Please turn off the raised hand after your Spanish speaking. Before you speak, be sure to unmute your line and a provider name, title, and organization. Please be sure to yield and removed your lines when not speaking. You should have received an agenda and the presentation, please open those documents now so that we can follow us through the meeting. I am pleased to introduce David Uejio who was appointed by President Biden . He joined the Bureau in 2012, and acting direct their Uejio has served as the Bureau's acting chief of staff as lead for talent acquisition and chief strategy officer. Prior to this time on CFPB, acting director Uejio served in the National Institutes of Health, the office of personnel management and the office of the Secretary of Defense. Please join me in welcoming Acting Director David Uejio to today's destruction . Thanks. Mike thanks you all for joining today's academic research Council meeting in my thanks for Joshua right. Every time we meet, we provide valuable insights and help us to see data in new ways. Your efforts improve our abilities to establish

 priorities and make policy decisions and protect and empower consumers. Thank you for your contributions. Our first and starting session today will focus on

 commuters, and then we will move into a discussion of Understanding Racial and Ecomomic Disparities in the Mortgage Market, then we will discuss new and ongoing partnerships. When I began as acting director, one of my main priorities was seeking to relieve consumers hardships due to nine tenets of nine co- Conine . [ Indiscernible] in this middle ground, consumers seek to fill the sum of their backs as they cautiously watched storm clouds for me just ahead. So we need enjoy helping individuals and families participate in the recovery while doing what we can to protect them from future financial shocks caused by the epidemic. Back in March of 2020 the government knew it had to act to keep families in their homes. At two months later, housing remains a key priority. [ Indiscernible - static ] aspects are catching up to millions of family who now potentially oh 18 months of mortgage payments or over years worth of monthly rental payments. Despite turning to pre-pandemic levels we must continue to provide support for families recovers yet not fully recovered. Following fast recessions come policy leaders focus on macroeconomic data to focus on recovery. Ignoring household data can cause families and communities to be left behind. In fact less than a year prior to the start of the pandemic researchers from Berkeley argued that stagnating wages and increasing inequality so that many parts of the country and never recovered from the great recession.

And right as the great recession him the AFL-CIO published an article saying that they continue to feel the effects of the 2001 economic crisis. We always seem to have people trying to recover from the last crisis when the new crisis is tells me we must focus on transitioning consumers and families to post their make economies to reap the current conditions. We have taken steps to do just that. August 31st, temporarily amended mortgage servicing pools will go into effect, the rules are designed to prevent avoidable foreclosures we want all qualified homeowners and other mortgage options are to have time to make the decisions that is best for them and their families. For renters, we recognize that many families continue to face the threat of eviction . We want families to find appropriate housing, we do one actions outside of their control to stand in the way we released a compliance on July 4 surrounding computer of their critical observations to accurately report information. We also recently launched a rental assistance finder tool. It's on our COVID-19 website. The sooner renters and landlords can find financial relief, the better the chances of tenants staying in their homes after the eviction moratorium ends. We known morning to be done. Throughout the pandemic, and even during the recovery stage, we received tens of thousands of record complaints each month. In the 12 months preceding 2020 we averaged over 20,000 complaints per month. Recently the average has been over 75,000 tablets a month. This task and continuing struggles and we continue to monitor and review the complaints to understand the problems and issues faced by consumers so we want to know what we can do to help consumers do in the post pandemiquette comedy when we did begin the discussion we will continue to discuss the evolving market effects of the pandemic. We will explore the data, and explore how we can continue to help them transition into the new economy and benefit from the national recovery. The second item on our agenda is racial and social economic equity.

 The pandemic has highlighted the struggles of communities of colors and historically underserved communities. Today we will focus on the mortgage market. The data alone cannot lead us to definitive conclusions that can help us right asked the right questions and identify the most relevant problems. We know applications grew substantially in 2020 because of refinancing at a pickup in homebuying. All glacial groups saw increases even though it was to portion of to the population, the black and Hispanic financing declined. In other areas we continue to see a lack of significant improvement. A few examples, black and Hispanic market applicant continued to be denied at a higher rate. We pay higher interest rates, and overall black and Hispanic applicants and borrowers continue to have lower median credit scores and lower median amounts compared to white borrowers. Homeownership is important to the growth of sustained family wealth we want to move the needle on home purchases by minority and low show's local economic individuals. And how do we get financing in the first place. I look forward to you hearing what you think the data can tell us. >> For last session today we will discuss the importance of research partnership. Research plays an important role in economic analysis. The CFPB is designing rules and we cannot do our effectively without some of the nation's best economic researchers. We also understand the importance of utilizing diverse methods and viewpoints. Research on partnerships help to incorporate distinct and unique perspectives and avoid research and policy silos outreach and partnership's assistance in almost every aspect of our work in rulemaking to ensure transparency and it often leads to insight for future research in rulemaking. The Dodd Frank act requires significant rules [ Indiscernible - static ] no later than five years after they began. Advisory board such as this one. They advise us on agendas data collection strategies and analysis and peer review for key research. We are also interested in research conducted

 that is relevant to the policies we face. I hope during our discussion today with talk about important research questions as well as some of the ways to research partnerships and strengthen the ones we already have.

Are important topics today your feet back and insight will help us protect consumers.

I want to thank you for continuing your work during this pandemic. We all took on so many familial and community responsibilities during this challenging times and your commitment is especially appreciated we've had to pivot as the effects of these pandemic of all to financial markets and community and we will continue doing that as we move through the recovery and hopefully the tail end of the pandemic. I know you all continue to adjust and I'm grateful. I also want to acknowledge unfortunately I need to leave today's meeting for previous commitments. My staff will remain and let me know key takeaways and actions. I'd like and by updating everyone [ Indiscernible - static ] on the advisory committees themselves and continue to review applications and make decisions and a number of outstanding individuals apply so thank you for help spreading your word for the public today. Thanks a lot.

 Thank you acting director, Dr. past the baton to the ARC chair Mr. Joshua Wright, George Mason. Thanks Trent Manny Mañón,, and I'd like to echo the acting director in the opening comments and welcome all of you to to today's meeting

 I especially want to take the acting director, as you can see from the opening remarks we are making interaction with the academic community such a priority in helping us achieve this objective, it's been a wonderful opportunity to serve on the ARC, and the openness and interactions with the interagency in the academic community, have been excellent, and we look forward to continuing to work with you in that respect.

As Manny mentioned, we are joined by members of the Bureau's academic research Council, or ARC, I'm the chair of that committee, but I'm also join today with the other members of our committee Terry freed line, Becky boatman, Mike Staten Tom Miller, and Michael Bay is absent today, but is another important member of our committee as well, and I wanted to recognize each of them for their contributions. To the -- I'd also like to acknowledge Jason Brown assistant director of the office of research was joining us today and has been key integral , really, in the actions of the ARC and has been a pleasure to work with, thank you, Jason.

 The ARC advises the Bureau and strategic research planning process and research agendas. They also provide the bear off a the Bureau with technical advice and feedback on research message data collection strategies analytical methods, including methodologies and strategies for quantifying the costs and benefits of a particular regulatory action.

Today, it's an opportunity for members of the public to hear about the Bureau's research work related to COVID-19, HMDA data, and understanding data disparities . Let's shift to our first subject matter COVID-19. We are joined by the office of research Eric Durbin, and Ryan Sandler. Erika, and Ryan?

Things very much. Just, and thanks to the ARC members for joining us today. I'm really excited for the discussion today. My name is Eric Durbin. I am Erik Durbin, Section Chief, Consumer and Ryan Sandler really is a subject matter expert today. I talked about some of the work that he's done. Just to say real quick that the office of research is work is generally focused on what I described as persistent phenomena, we are looking at particular credit markets, how consumers view credit markets how consumers make decisions about saving a borrowing and that sort of thing, the acting director mentioned the notion that we pivoted in regards to post COVID-19, one of the ways we pivoted was in trying to look at real-time developments in the economy [ Indiscernible] [ Indiscernible - muffled ] it was good to be important to leadership understand as much as possible about how the economy was evolving and how credit was evolving in response to the pandemic. So, we are going to present relatively briefly some of the things we

 been finding about how consumer credit has evolved during the pandemic, and really looking forward to your thoughts about what other things we should be looking at whether we should be looking for in the future, and and how research should react to the ongoing

 economic situation.

So, I'll turn it over to Ryan to go through that.

Sure. Thanks Eric, thanks to Josh and the committee. So, back in April of 2020, we started trying to figure out what we could get out of the Bureau of some consumer credit Cannell to tell us what's happening in the economy. Or at least in credit markets, and at the time, my colleagues got [ Indiscernible] put a report out on inquiries and we started setting up code that could look at other credit outcomes, even though we didn't even know the data yet. So to remind you, the consumer credit panel is a 140 D identified corrected from nationwide consumer reporting agencies. We get up late so the data monthly, usually, we get data from the end of the month and into the middle of the next month so in practice, at the end of the month data tells us mostly about the month before that, but still even a month a half delay is pretty fast when it comes to economic data.

Last August we put out a report summarizing the early effects of the pandemic for consumer outcomes which if you were here in the meeting last September, it was presented and we continue following these outcomes through April, and May of this year, and kind of the striking thing we've been finding is not a lot of changed. So early in the pandemic as this graph shows, this is showing the share of open auto loans versus motor church student loan and credit card accounts, that transitioned from the current to prior month to delinquent in the current month which is the Green Line or transitioned from being say, 30 days liquid to 60 days delinquent from one month to the next. And one thing is clear. And that is that these new delinquencies declined in the early months of the pandemic. They were mostly flat or increasing through 2019. And then after about June of last year, which evidently was when our report came out, for auto loans and mortgages, those did start climbing back up, and they never actually really got above three pandemic levels, and then starting early this year, then

 delinquencies fell again and part of that of course is going to be the consumer affects that one out in January and February of this year. So we can go to the next light.

 Part of the story here of course, is assistance being offered to consumers through carer's acts and related programs. The CARES Act required that all federal student loans were automatically put in the payment suspension, that is of course why there was a precipitous drop off and the liquid seen in student loans and mortgages anybody with a back more just back for forbearance, they were required to give it against the consumer tested that they had COVID-19 related financial distress. So course, we see an increase in the overall number of consumers getting assistance in the Blue Line here for all these types of loans, but then, after about May or June of 2020, the share of loans getting in suspense declined. Auto loans and credit cards where they didn't have the CARES Act support comments down pretty much down to the level of the sort of pre-pandemic levels despite the fact that we're not seeing increasing in delinquency yet. We can go on to the next slide.

 The other thing that we've been finding is that there's not except for us, number places we've been finding there were not seeing people turn to credit cards to support their spending. Spending in general seems to be down. So, all of the graphs we show here, in this presentation are featured in a series of blog posts that are going on at Finis.gov updating results from the August 2020 report up to whatever date was most recent when we ran the logs.

And, in the post on credit utilization, we show that credit balances are down, credit card utilization rates balance the share of limits are down, and

 interestingly, even the share of people who are borrowing from month-to-month or down. So this crap is not actually from the consumer date of its from the credit card database, the Y 14 and is a collection that the Federal Reserve does from large credit card issues which represents about 30% of credit card balances. The graph in the blue line shows the share of Karen accounts where consumers are borrowing month-to-month you can observe it and slide 14 whether or not the account was paid in full. The Sharon accounts that were revolving from borrowing month-to-month fell, they haven't recovered. Most of this seems to be going to enact their status. So accounts that they are not putting any balance on the post to still using the card, but paying it off in March, will that is increase. The trans-actors as we call them accounts where there is a balance, but the balance was paid off every month. So we can go to the next slide, one glimmer of a share negative result in the credit record data is in credit limits.

We do see for credit card accounts, that this is showing the cumulative change in existing credit card limits are not counting any changes in consumer's overall credit limit because of counts closed or open just limit changes on the account, so in normal times during 2019, on average most of every credit score group peoples limit increased that's how credit cards were, that's how the market works, that starting in March of 2020, limit increases for Hyatt critical score groups, fall, and for super prima account, they actually fell. This is something that we falling great recession too, precautionary reduction in revolving credit by credit card issuers, the taking of primarily in active accounts and reducing their limit and closing accounts in advance of a consumer getting in trouble and running up the credit card balance, but aside from the super prime group, were not seeing larger limits, and also starting in the last nine months or so, limits are now increasing again. So we can go to the next slide. The one other thing that we look at

 in the blog here, this is an advance look of a blog that includes this graph will come out in about two weeks. This is nothing that we did in the August report, either. So this is looking at access to new credit, so it's the share of inquiries, auto loans

 mortgages and credit card increases when you apply for credit, and the credit does a hard pull of your credit record, we see that. And we can see whether an account opened shortly after you made the inquiry. So, we see, and these were mostly flat, or increasing in 2019. But in March and April of 2020, we do see a short-term decline in auto loans, but then increase in that rate goes up, now they are higher than they were pre-dammit. There is a general upper twin with mortgages, and its increase since then. We do see one spot of concerning credit cards where there is a decline in credit cards expressed rates, they are covered, but it's not recovered all the way.

It does, there is a lot less, there's definitely been a lot less credit card use, there's also a lot less credit card credit out there. Part of is the reduction in limits I show before, but also, in Ava Scott, and Krista's work they show there's a large reduction in credit card increase, the number of applications is down. In the share of inquiries of new credit card applications that are successful is down. Limits are down, so there's less credit card credit out there than there was before. Though, there's a little bit of a puzzle as to why were not seeing major negative credit outcomes to some extent it's more complicated to now that credit the economy seems to be doing better. We didn't see much happening when the economy was suffering. We go to the next site, we can move to the Q&A and start with the first discussion question.

I will read this out. And start taking questions. So credit record data hasn't shown much of a negative effect of the pandemic on consumer credit outcomes. At least part of the story is that economic stimulant and payment assistance has kept some consumers afloat. The questions for you are what areas of consumer financial distress are being missed by the data available to the Bureau? I told you about our data administrative data from our credit panel which is credit reporting data, but there are there data sets that we should be pursuing in better measure of the full picture of financial distress?

And yes, there's a follow-up question, but when we start with that? >>

Also with you. But unless I'm missing something, not sure there's much of an explanation for lack of distress other than the fact that it's just simply not being reported, or hasn't be reported on his consistent basis for months and months. There are certainly some other kinds of measures you could look at that aren't credit bureau data like tracking eviction notices and things of that sort, but I would think that if that I mean, it's kind of a question of what you want to know? I think it's, I think we've just got,

 you happen to have a database here that is for very good reasons masking most of the distress signals that we normally have become accustomed to looking at. So that's just my first thought. >> That's a very good point. If you have any notice of where we would get that kind of data, or who tracks that I'm a that would be things we would be very interested in. >>

Terry, I have you in the queue, do you have a question, or, they are, go ahead.

Yes. So, thank you for your presentation, I appreciate you sharing this data with us, and I similarly to what Michael share, one of the things that stands out to me is, you know, what data are being missed and where can you capture it? I think probably, like many of us who are pivoting over the course of the pandemic conduct research in ways that we didn't anticipate. I ended up , and my colleagues and I ended up switching to doing some qualitative work on how people are experiencing you know, debt and access to credit, and finding you, how they described , you know, really important effects on their health and mental health. And I think we had a presentation maybe a few months ago on looking at the effects on health, and if there's opportunities to pull in data, you know, that's a little bit more qualitative in nature that might help to pinpoint where different areas of distress are being experience, and then what other perhaps you know, quantitative data sets might allow you to capture those experiences differently. >> That's also an excellent point. I would be remiss, Pfizer, I didn't talk about my colleagues excellent now sprawling project with the making ends meet survey which is survey that we talked about in previous ARC meetings, is survey that's linked to those consumer credit panel where we can ask about these things. I do recall a preplanned way of making ends meet went out in early 2020, I think of in there, found that at least consumers who were having financial distress, pre-pandemic, also were actually better off early in the pandemic than they were pre-pandemic, but I don't if there's another way of making ends meet that went out early this year, and we are just getting data back, and I think that's where we can get a better look at that kind of information about what's actually happened to people by asking the people.

Tony, I had you in the queue next.

 Okay, two points. Number one, you've got to be careful about confusing the solution with the problem. If I'm very optimistic about my future earning potential, it's likely I may finance consumption with debt , if I become less optimistic than probably I'm going to want to carry less debt. So, one of the reasons that we see contractions and borrowing, is that the people are less optimistic about their income increasing . Of course, another fact is by regulation, your almost prohibited from consuming, right? And it is cheaper to feed yourself at home, then it is in a restaurant. So, what we see here may be the solution and the solution is motivated by a change in perspective as to what can happen to your future income. So, that's the first thing that I think when you talk about this is going yet to be careful about that. The second thing I would mention is that, you have some idea of having a financial stress index at a previous meeting we discussed and, I urge you to continue to pursue that I can convey some ideas for the key, I think is, that just as we now have multi dimensional poverty measure , having a multidimensional credit stress measure would you know, would really help you and, in that case, of course, I mean, part of the real problem is that credit stress is partly based on your ability to service your debt. But having a credit stress index, I think would be basically a swell idea. And, just looking at these numbers by themselves, you have an issue of distracting consumer credit could be the solution rather than the problem.

Those are really good points. I know that I'm not the one that should be talking about the credit index because I'm not gone to some of the internal talks, and have not done work on it, but I believe a lot of the measures that go into the index, at least are currently going into the index are similar to the ones that we are measuring here, so it might actually measure the index and we are currently working on actually show similar types of trends. But I don't actually know them, Martin should probably pose a question to the team that's working on that section.

Vicki, I've got you next in the queue.

Thanks, Josh. I actually wanted to circle back to a comment that Terry made previously when we were talking about what are the things that might be useful to look at ? And you know, the core of the pandemic, it has been a health crisis, and a lot of my research looks at the relationship between our health expenses, medical expenses, and financial distress, and as we think about even, if we get over COVID-19 there's long COVID-19 , and some of my research indicates that you know, between one and some study says one in three people have long COVID-19, other studies say one in 20 people or one in five people, but there may be some long kind of term health effects of COVID-19 that could have significant impacts on people's household finances, you know, I was wondering, if you had thought about, or looked at, you know, I know the consumer credit panel had sort of minimal and nonmedical elections at one point, if you had looked at those types of expenses, and their connection, and if those had changed at all over time? That might be something that would be, I would think would be important to look at, right, because of health crisis, you have, the medical bills, but you also have the influence on job and loss of ability to work because medical affects are more long-term. The other thing that I was wondering about is if you had thought about at all is you talk about in your presentation how people are using credit cards left.

But that's in conjunction with a lot of forms of economic assistance. As a sort of rolloff, it would be interesting to understand people go back to credit cards more to help them you know, as the economic assistance tapers off, you know, there could be a bump because people are using those two kind of bridge the that student loan assistance, it might be where we are seeing that would stay static as the program start to taper off. So it would be important to think about how consumers are affected when the assistance starts to taper down and they might go back to the credit cards in a big way.

Yeah, as far as the credit card, you are anticipating the next discussion question, so I will delay that thought for a moment, the medical question is a really interesting idea, we had not pursued that currently. I think whether that was necessarily started showing up yet. This is just, you know I'm not doing the COVID-19 tracking, these are maps I'm doing in our debt collection rulemaking. So that is in the CCP. I am not sure how long it is between you would have the debt, have the debt overdue and have it sent to a collector and have it furnished, whether we did see much of that yet. We certainly might from early in the pandemic, but probably wouldn't have the full picture you, Barb will be part of the reason we didn't do the access to new credit piece in the August reporters because that's a pretty long lag between when an account is open, and when it shows up on the credit report reliably. So as of August of last year, we only had like, new accounts from March of last year. So we are able to work with that.

They can work with collections trade lines, but I don't know that for sure, that would be very interesting to look at. Thank you.

Rings.

Tom, Miller, I've got you next in the queue.

Yes, thank you.

Thank you for your presentation and thank you for

 the other, inspire other ARC members. I'm just curious actually it seems to be the products that you examine seemed to be used more by prime borrowers than subprime borrowers, and I'm wondering if perhaps, if I take another look, and look at how credit uses various by credit score buckets

 in different sizes, or in different classifications of credit scores, and also look at products that are used by subprime borrowers like cash installment loans from non-bank suppliers by finance companies. >> Thanks.

 In terms of credit score buckets, all the drinks that I showed in this talk, and in the deck, we do have versions where we have broken it out by credit score but, also broken things out by a number of other characteristics including age, census tract, demographics, change of the county unemployment rate, how are the employment rates affected by COVID-19, everything is the same. All the breakouts by group are different. In levels that you would expect, high income areas have lower delinquency rates and lower errors, nothing terribly surprising there, but the trend is exactly the same. The one graph I showed that broke that limited just by credit score group, that's the rare case where there simply a difference from one group to another. It's also been one in providing [ Indiscernible] so little variation across groups. And immediately, we have very little in the way of individual demographics beside credit score needs. So it's possible we are missing something because we are not going by the -- For race breakdown, we are going by the race census tract not the race of the individual which would be a great thing if we could actually get that as race recorded on the survey. In terms of other technical, part of the reason we were getting at these types is that they are big. You know, they are big credit markets, we don't have a lot of the

 installment loans, we can break out personal finance, I said to remember there was a project to try to get the credit. Her to identify for us which were like the lending trees , not lending tree, and thinking you know, the prospers of the world, and that never went anywhere. So, it's not possible to identify. >> Mike Staten .

So I want to follow up on Tom's comment there , I mean, first I will preface it by saying, I think we are in a weird. Here where, you know, this whole thing may become a moot point in another six or eight months, we don't really know, this urgency is going to end, but the spirit of flying blind is not to last forever and pretty soon we are going to be flooded with single that tell us exactly how much stress households are in. But for the moment, I think when we are in a., A very unusual., But for something like this, I think intuition kinda tells us, maybe put yourself in the position of the household to experience income interruptions. Because frankly that's where the an economic distress is coming from across the country, people were thrown out of work, you know, in retail or hospitality sectors, or wherever, that's where the bulk of the disturbance has been. So what have they been doing all this time? And sort of go through that thought experiment, you know they've had some suspension or relief or making a mortgage and rental payment now for a while. And or receiving some sort of assistance and that's freeing whatever income they had to move to devote other areas probably still having to struggle to make ends meet . Don't know whether the stimulus checks of help to what degree, or whether some of that employment has come back am about to the extent that you can track those sorts of things, that may give you some clue as to where to distress happens to be, and the use of these alternative financial products that have been suggested payday loans and things like that, there's been a blip in those sorts of things, there may be another signal to, but it's almost, I mean, it's, I just have a feeling that by the time you figure out what good measures to use, you won't need them anymore, except for maybe the next crisis.

That's a really good point, and a lot of the alternative finance sources just aren't in the credit panel, because it's credit bureau data that's what it is. Some of that I know the making inmate surveys got not that questionable payday loans. I think the use of that was down in the maze of it, but I might be making that up. We have, a report out about the May wave and server that was early in the pandemic of the was a report, I think going to come out in the next I don't know, 6 to 8 months from the most recent data survey, so, I think we've and by we, I mean the office of research, not because I'm not on the project have just gotten the data in ready to use from that third wave that went out early in the pandemic that had directly pandemic related questions. That'll be really interesting to see if we get that back.

Just on the payday loans in particular.

The making ends meet survey, that's asking about the use of payday loans as auto title loans on prolonged borrowing on use, but the sample sizes are smaller and those are products that are used more recently in the population, so for the May survey I think we did see a decline, something of a decline in the use of payday loans and those other types of loans in a fair amount of persistence in those who use it during the pandemic very early in the pandemic and making the sample size is relatively small so, that is the challenge of the survey and the great thing about the CCP is just the sample sizes. But the downside only reports on that potential credit that refers to those loans.

Terry, that's a really good point there's a point in the chat sang, maybe you want to ask if you want to use strategically in the next crisis to have a real understanding of the depth of people's financial distress. It's a really good point, although, I believe and I may be making this up, I think there's a part of the motivation in developing it wasn't the consumer credit, that was a different case, but part of the reason we develop some of the data we have, think not so much partly the consumer credit panel but also the national day good mortgage database is what we would've needed to track the last crisis which was very much a credit crisis and the crisis we see in credit card debt and mortgage debt always, the challenge here is we segue to cite the last four. >> Ryan, I don't have anyone else in the queue for that question, do you want to segue, or transition over to the next discussion question, maybe set them up a little bit?

Sure. This is related to oh, yeah there was a second sub question, I don't know that we entirely touched on, but I will pull that one, so we talked about what we are missing in data, but the other question is that obviously a huge part of the story here is the economic offset between stimulus checks high unemployment insurance, CARES Act forbearances for mortgages and student loans, and it will probably be sometime before we have data that will tell a causal story, but I find it hard to believe that the credit picture would look quite so rosy without those things. And so, my question for you all, is what should we be watching for us these programs end? Currently I think, the student loan program was just extended, is hard to know what's can happen with the CARES Act, but likely sometime in the near future, the support for mortgages and student loans are going to end, I think we have unemployment insurance mostly extended, what should be read be watching for as all that, all those factors rolloff? >>

 Go ahead, Tony.

Okay. Well two reactions, first, everybody's got to be working on that. There's can be so much research on this topic, it's you know, pretty much going to be unbelievable. And, second observation is what happens is going to depend upon what's going on

 in your housing market, right? I mean, you know, we have markets where costs of houses in a year rose 24%. I think those mortgages are going to be pretty solid even if after this moratorium ends, there has to be a, sale of property , I think those borrowers are going to do pretty well. On the other hand, you know, if house prices rose 3%, that's a different story. So, it's going to be a fairly nuanced sort of a a, in France finally, one last point general penny, but something that actually, the CFPB really ought to worry about and that is right now

 payment option mortgages aren't even legal. And yet the government periodically mandates that the payment on a mortgage be optional. So, this is basically completely nuts as public policy, right? I mean, if you're going to say that you can't contract the terms under which payments can be optional, but every once in a while, the government is just going to say, oh okay, payments are optional? Independent of any contract? You know, that's you, that's about as completely contradictory as public policy could be. So it might be that the CFPB ought to look into that and suggest that maybe we ought to allow for mortgage contracts to actually have some payment option provisions in them that would perhaps regularize what's going on that is if we care about rationality at all. >> Any other questions from the ARC team on this sub question? Why don't we roll to the third did?'s sounds good. Okay, so this gets back to a point that Vicki was making earlier. At least during the pandemic credit card utilization and usage pattern seems to have changed. There's a graph that I showed on the shared consumers revolving versus transacting on their card . That's change. Utilization percentages are down, which is a little surprising inasmuch as, our colleague Scott has a paper showing that during the great recession even during the great recession there were huge changes in credit limits going around utilization relate rates were market is stable. They are actually down during the pandemic. Of course balances are down because spending is down, and there's less sorry, got distracted by something, which is partly because is less to spend on, and partly because assistance like was mentioned, so do you think that these patterns are going to revert as they read economy recovers? To this sort of pre-pandemic norm, and what factors do you think we should be monitoring?

 >>

 Let's start with you Tom .

Okay, thanks. I think I'd just like to go back and reiterate what Tony said, and that you, people are forecasting their own incomes and in their own financial situation, you might not see any big change unless there is a change in the expectations of the families. If things are going to get worse, you'll see less credit, things are addicted to get better by his family, you, perhaps you will see more credit usage, so, I do think that Tony has a really good point. The, each family each persons, each family unit forecast of their financial well-being will be a big driver for what we see.

 >> Terry?

 I think I would expect patterns to return. And the inequalities that you know, we've seen across income and race , that those would expand as the economy will not recover , people will not experience the economic recovery implement rate and black and brown Americans will continue to be twice as high as that of white Americans, and that some of that will be I think reflected in credit card utilization, so I would pay attention to the extent to which our inequalities unit, the inequalities that existed pre-pandemic grow after it's determined when the economy is at a point of kind of on average recovery.

 >> Michael Staten . >> Mike, you there? My mistake.

 [ Laughter ] no worries. I was just going to echo tears, sir, think we see too many credits articles in the past where you know, as we were coming out, there were questions as consumers finally got religion with respect to by the borrowing is going to be a seachange and ever do is go to be more conservative going forward I don't see any reason to expect that this time going through, think the patterns that were extended improving credit utilization a credit card and credit card you should is more reflective of rising incomes, broader access to credit cards, unit, writ large over the last 30 years, and the emergence of alternative payment systems may be tamped down what we might've expected with credit card usage otherwise. But I don't see that having change to the pandemic, they probably return fairly quickly, as quickly as the economy recovers, let's put it that way. An employment recovers, I think we'll return to past spending patterns, eunuch of the people with higher credit scores and/or higher incomes and have more things to spend money on than they have in the past, and we can see that reflected in credit card charges just like we have in the past so, I don't, there's nothing structural to me in what's just happened over the last 18 months that suggests that those trends would be different once we returned to normal economic activity.

That's a really good point Michael, although, the thing that has sort of been collating in my mind in speaking about this, is that employment has started to recover, and indeed started to recover over the last you know, 12 months or so. But, credit cards and credit card usage, and credit card utilization rates have not. They've continued the downward trend, and admittedly the demand opportunity is not clear how much that's recovered. I mean, I can see somebody it's going to spend the money somewhere.

But, yeah so it's a question of at some point, we are to start seeing this come up if people are hurting, when do we expect to see that happen?

Yeah, that is a great question, and I think you know, international travel is still pretty much limited for most people, so we don't have that spending category any longer, hotels and restaurants of comebacks instantly, but still not quite to where it was, and that spending opportunity is still at bay. And so, I think we just need to watch for all of the other signals that were looking at in terms of all of the amount of lockdowns we are experiencing the pullback in terms of what's open, and whether there are capacity restrictions that come off, I think it's going to snap back pretty quickly.

Carry? >> No, just wonder, one of the slides that you shared with us was on credit limits on credit cards over time were frozen. And seeing a drop of the particularly the super prime, and also like near prime prime credit score unit, folks with credit scores, and I just wondered if you had a sense of unit, what to make of that, and if that relates kind of to this question about utilization, and usage patterns. I have some thoughts, but I wonder if that's a part of the story, if you'd like to spend time speaking on that. >> I can spend a little time speaking on it, think it's all part and parcel sort of, the preemptive credit revocation by the credit card issuers, some of which we saw in the great recession as well, where sort of to prevent people who have good credit, and aren't using their cards from running up balances on the cards, as they have limits, or on those cards, and we did, there's a carafe in both the blog post, and back in the August report showing the share credit account that are closed each month, and in dij,

 in April 2020 there's a big spike, they cleaned out a bunch of inactive accounts, and then they were good. And then the closure rates dropped back to pre-pandemic normal levels.

This is such as another factor that's leading to the overall credit account credit health, because even if they are at an elevated level, they are at a lower level, interest rate so the overall limit out there must be going down.

 Thanks for that, I wasn't sure I was reading this correctly, because what is making me think is that those with the lowest criticalness also may be having the lowest incomes are having limits on their credit cards. You know, maybe possibly raise stores extended which would mean you, opportunity for more divestment in financial distress at the end perhaps not, but thanks for explaining that.

Michael.

 So, Ryan, one of the things I just remember, you asked the question, when might we expect a sort of return to normalcy, and to check and see if Spinney will come back , there's been a really interesting index that I started following about four or five months ago that Goldman Sachs put out, I don't know if it's reopening index, I don't know but they managed to put together a variety of different data sources like tracking airline website visits and bookings on airlines, and numbers of restaurants that are open, and there to doing it basically as an international index, they haven't put it all into the former, but to see how relative rates, and which area great France and Britain were returning to normal, but there might be some clues if you're really casting about for data, and again, keeping in mind that maybe this is all good to be over in 6 to 8 months, who knows, but for the next crisis, if you're casting about for data, and look at those sorts of sources because it's pretty darn interesting in terms of granule measures of activity that would be a significant predictor for or real-time indicator of how people are feeling with respect to spending and I'll just throw that out there. >> Ryan, I think you have I think you can declare victory, you've exhausted the queue of questions. And I have been granted permission , I think we are a couple minutes ahead of break time, but if you want to close with any closing thoughts, you have or what not, we can close their and take a break to come back for 230 for the next panel. So , anything you want to close out with, Brian customer

Not from me, except to thank you all for your thoughts and input, will offered to Eric, if Eric Scott any closing thoughts customer

I'll just say thank you as well, I think that's really interesting, we've got good ideas in this, and just based on Michael's comment, if we had a state level opening index that would be a great tool for maybe even after we come out of all of this to understand what the effect is going into this in any case, thanks everybody so much for devoting your time.

Thank you so much, Eric and Ryan, and we will take a break , and come back and reconvene at 230 for the discussion on the

 HMDA data, Understanding Racial and Ecomomic Disparities in the Mortgage Market , so we will see you at 230. Thank you. [ The event is on recess. The session will reconvene at 2:30 p.m. Eastern Standard Time. Captioner on stand-by ]

 >> Okay, welcome back everyone from our break. It is time

 for the next session. And we will shift to the next agenda item which is HMDA, understanding , Understanding Racial and Ecomomic Disparities in the Mortgage Market, and we are joined by Feng Liu, Senior Economist, Office to present. Are you there?

Yes. >> [ Indiscernible - overlapping Speakers ]

 This standard disclaimer slide. >> Let me start with the presentation of the

So, what is HMDA, data collection reporting disclosure statute that enacted in 1975.

 It is used to determine whether financial institutions are serving the housing needs of their local communities, to facilitate public entities distribution of funds to local communities to attract private investments, and to help identify possible discriminatory limiting patterns. Institutions covered by HMDA are required to annually collect the reports with certified information on each mortgage application acted upon or purchased during the prior candle year.

 The data collected in 2020 and reported in 2021 R survey data of incorporated amendments made to the Dodd Frank act. It provides good insight on the racial economic disparities in the mortgage marches. That's one of its purposes is. But it's important to enter size that the

 HMDA data alone cannot determine whether a financial institution is engaged in discriminatory lending. It often requires additional data and additional information to make a further determination. >> Basin the recent HMDA data we have one forthcoming in the next week, is about the 2020 mortgage act activity and it's taken from that.

And July 2021, we have another compilation of data on Asian American and Pacific and islanders in the mortgage market. And then in June 2021 with a brief note on general lending patters to small and medium-size closed-end HMDA reporters.

 And we have manufactured housing Pfizer and in June 2021, and we have two articles about HMDA and an updated review of new and revised data point published August 2020. >> We will examine that in today's presentation.

Said today I'm going to try and cover several major subjects from HMDA. Racial composition of originated loans, denial rates, and the characteristics of mortgage including credit careers six and mortgage pricing. >> On the racial composition, this is a chart to show for the past three years, a home purchase loan by race and it is today. This is for the past three years of HMDA, the share of minority here Hispanic, white, and borrowers and the share of the amount of purchase loan are certainly no more than their share in the population.

From year to year, they also change.

The next chart, this was a refinance loan that showed the similar panic, panic Hispanic and black come before the population.

 But it's interesting to see how the Trinh changes over time. To the extent that this chart plots out origination volume separated by the purchase, non-cash out refi, cash out refi. So let's look at the home purchase alone that the green line. Typically the home purchase loan origination with all at the housing market does.

But, if you look at in 2020, that one thing in particular is like a big plunge in May of last year, where the housing market typical of getting to summerhouse sales season, there was a dip in the home purchase loan origination contradictory to the season pattern. We believe that's a strong signal of what was on the COVID-19 as a nationwide shut down.

The person volume quickly picked up starting in June of last year, and then built and stayed at a fairly high level especially computing with the year before, so that is quite a way for away from the overheated housing market. The most prominent feature of 2020 is also in the closing market was refinance.

By looking at the shack, particularly the non-cash out refi, the refi was actually denied and didn't start until 2020, you really started in 2019. Other than that the , the slight dip in the last quarter of 2019, you can see the refinance was very much like the trend in 2090.

The cash out refi also increased but, that was really foreshadowed by non-cash out refi and that is those extremely interest rate . So that's a background. So let's look at the next chart and see how this buried by race and ethnicity.

The home purchase loan, you know, the vertical axis shows the amounts of the originated and volume by rate the necessity. The top line is that you can see overall all through here, the origination volume [ Indiscernible] but, because of the wide followers come from the significant large amount of loans compared to other groups, so, in order to see this visually, let's go to the next chart.

So, this chart really is the large example of wide coming you can see they minorities more clearly. And from this, you can see the increase of the home purchases in volume almost by the group here. Next chart.

So this where the Y excesses not

 volume, it's shared load of how much racial and ethnicity characteristics you can see the scenario where there is a drop in share for white and an increase in share for others. And we can begin, with the next chart, you will see this focusing on the other primary group. And we can see that increase of the share of the group in the second half.

Now, let's move on to the refinancing. That's the most prominent part of this. And again, it seems like it's pretty clear the increase the refinances occurred for all the racemic method groups in the chart. But it appears like Asians had the most [ Indiscernible] coming you can see this more easily when we zoomed to the next chart, with the minority group, and you can see the Asian volume equates mostly to minority groups volume increase but more than the black and Hispanic.

The next chart, will show this year.

Similarly you can see the increase this year of the origination compared to the black and Hispanic, being more prominent weasels into those on the next chart it

So clearly you see in 2021, the Asian share of remind refinance increase from the low to very low level two 2018 to over around 7% here in this index for 2020.

What a black and Hispanic in here the backdrop a relative increase in absolute volume but a relative share an increase in black and Hispanic. Next, please.

This chart, is all about the origination loan. This one looks at the denial in the database that is collected for the applications.

This came from an API report, so this is establishing the past, we know that, this is confirming 2020 that black and Hispanic borrows are no likely to be denied then Whites and Asians, so in this chart it shows a black applicant in 2020, about 80% of the completed applications were denied, and 12% Hispanic, white applications where denied compared to the 7% for whites and a person denial for Asian, and Pacific Islanders per

The next chart , the next chart takes little for their a poking on the AAPI subjects, so it shows that despite the low denial rate for 10% in the general group, if we look at the disaggregation as we assume it's allowed to be going on to the HMDA data and beyond, there are certain subgroup in the population such as Vietnamese and native Hawaiians have an denial rate closer to slightly above that of Hispanics at 30%, and a HMDA let's call that a denial rate of 12% per

So that has a dimension, with a lot of axes that came to us in specific amounts of denial disparities.

Next. >> Obviously those denials are common whether we show about an account for specific incidents of loan to borrowers. We know that borrowers very by rate in business today. So this chart 2020, the re-VM by subject , purchase, refi, and the effects. It apparently has agent borrows took out the largest loans in refi, while black and Hispanic borrows took out the lowest median loan amount to purchase and refi.

Next chart. >> And again, this shows that we have [ Indiscernible] while black and Hispanic are lowest median scores compared to white.

Next, please.

How much were borrowed payments? In terms of its history, the overall risk and rate in 2000 20 where variations of various interest rates it still existed, just had been the previous year which we observed. [ Captioners transitioning ]

>> The amount of refinancing. That variation of interest rate, and Asians paid the lowest interest rate while the rest was about the same or around 3%. Next chart please. [indecernible] originally in charge by the lenders, and the Association by obtaining a loan. This chart shows

 that for purchasing and refinancing loans, black and Hispanic

 turn out to be the highest to the median total loan cost compared to the white in interest financing. We talk about the credit score and here is the credit score distribution and we all know that credit score is important. The credit score shown and what will emphasize this chart, and you can clearly see the histogram and Asian and Hispanic and the non-Hispanic white bar, has a higher credit score than black and Hispanic white. One thing that I want to point out is that with this application level you can clearly see [indecernible]. That very much means that lower credit score distribution and in a way there is heavy screening and prescreening

 and eventually capturing to the full application. The next chart is very similar and this chart is a jumbled space and the credit score distribution for Asian and white was higher than black and Hispanic. Next chart. You can see coming along in the [indecernible], and still some disparity between the different groups. Next please. Those are actually included in 2021. Next please. As we show an application level across different races and at the city has a different credit score and it will have a sound influence and this particular offer, [indecernible].

 The denial rate , and the credit score denial rate is, and this chart shows that even with the same credit score, the same credit score level, it is higher for the Hispanic bar application applicants can then white and Asian. This is important observation for some. Also [indecernible], and this will be shown in the next chart that you will see. A denial rate and even credit score, and we see a new data point with HMDA, and he clearly shows the same credit score with the black and his spot --'s Spanish court tending to have a higher bar. This can help to explain the chart that we saw before this one . The rate is higher for black and Hispanic. [indecernible]. From a researchers perspective and gives us a better understanding and with that I will turn it back over to Josh for a panel discussion.

Thank you Feng for that excellent presentation. So we are into the Q&A session, and if you raise your hand virtually I will see you, and I will be able to call on you. I think there is a lot of potential places to go here, and questions ranging from what we think and what we learned from the data and interpreting the data and what we can do to help disparities in the mortgage market and all sorts of specific questions. Let's first start with members and see if you have any reaction to the presentation or direction she would like to take the discussion. Tony.

I think the next step in all of this would be a statistical analysis. You try to estimate models of the underlying decision, to price credit and what have you, and then you try to relate all of these factors simultaneously to the final decision rather than doing things one at a time. Even when you do it one at a time you don't have any statistical significance out to let us know things are different. That would be a first thing. The second thing is we presumably have programs like FHA which would have characteristics that we would expect, and let's put it this way. If there is a problem with FHA and there is a problem with the government right? Perhaps we should take a look at those programs separately and see if they have similar patterns to others or in fact they are totally different. Those would be my two comments with the first being all statistical and if it does have statistical significance in a multi-varied context? Secondly break out the government programs, particularly FHA. I think VA is a different operation and particularly FHA and see what it looks like. The final general comment that I will make over and over again is remember where you are matters in mortgage lending. If you are in some area where prices are rising rapidly, then that probably has a negative effect on the fault as opposed to areas where house prices are flat or falling. That also needs to be considered. Those would be my comments and basically most of that is pretty much standard in the literature. If you look at the academic literature on these topics I think you will find that in the literature.

Thanks Tony and let me open it up to other A.R.C. members with general responses and reactions, comments, ideas on follow-up research to see what can be doing to address racial and economic disparities in the mortgage market, topical ideas, with a logical , and Terry, let's go to you.

Thank you very much for your presentation. Kind of a general comment one of the things that struck me as she was presenting was our vantage point into some of these disparities in the mortgage market, or disparity in consumer financial distress and it comes from the vantage point of the consumer, and it makes a lot of sense and charging him protecting consumers. Something that you mentioned about the distribution of credit scores and perhaps representative , not making applications, and having them be spent at a different point in the process. Also these distributions was just one snapshot of the process as it happens more toward the end. We often have a vantage point into the decision-making within institutions and how institutions are making decisions at particular points along the process. Those that relate to how consumers experience them. The FDIC at various times have conducted surveys about how financial institutions are serving un-banked populations. A running survey on the experience of households from time to time, and they have taken the direct questions from the institutions themselves and what are they doing to serve populations and responding to this challenge. It might be helpful as another source or another vantage point and another source of information is what are institutions doing that might have implications for racial disparity and housing.

Thank you Terry.

Thanks Josh and thank you for an interesting presentation. One of the things that I wanted to mention that struck me is as I look through some of the information or the discrepancies with the racial disparity and refinancing rates. One of the things that I think would be interesting to look at a little more is a lot of that work and research in the mortgage market is on the primary market, and we are starting to see some more interesting research on how there is racial disparities in exploiting lower interest rates and refinancing. I think there is quite a bit of opportunity to explore why there is such discrepancies in refinancing and what are the factors that meet that ? Also think about considering policies that help to reduce barriers to refinancing for minority borrowers. Those are the things that struck me from the data that you presented.

Thanks Vicki. Feng i don't know from those original comments, I had been collecting them for feedback and would give you a chance to respond at the end. If there is any of those that you want to expand on and engage with and respond to now I am happy to let you do that now, and we can go back to the questions.

For people who do not know Tony was my PhD advisor and very rare for a student to ever have an opportunity to speak in front of his advisor. Thank you for what you have taught us.

By the way thank you for being such an excellent student. It was always a pleasure working with you.

Thank you.

[indecernible].

 You teach us and we learned and we learned together. On the second question that you had, I totally agree and on the monetary analysis, it is just insufficient research

 and is a [indecernible], and the last chart that I showed was that we need to have more factors to show to basically get to a solid explanation. On the FHA program and grants, I can show you there is one example of why [indecernible] would be really helpful . It shows the median total, for African-American, but we also know that FHA loans tend to have a higher median, and added to the fact that insurance premiums are required. That increased to a sense says that Hispanic and black borrowers are more likely to take out FHA loans. I am not saying that was hopefully efficient and I will get back to your point on analysis. [indecernible]. What we have seen in the past, and [indecernible], and it has been many years, and there is always an issue on this from the research perspective.

 The application level, and the application is not entirely what it demands. More guidance from you, the A.R.C. members, and for the point about

 a lender decision and absolutely that is important. Because we also [indecernible], and we actually have this ability to go to the financial institution to come back for an investigation, and we have access to lenders, and we have a much better understanding. In our modeling, looking at the different financial institutions, with the decision or mortgage pricing, and we have a much better chance for the public to be on our side to model [indecernible]. For Vicki's question about refinancing that is an important question. They are less likely to take advantage of the lower interest rate from a research perspective and a policy perspective. [indecernible]. That is a very rich field and I think it's should be.

Thank you Feng. Beaux-Arts great responses. I think for me one of my reactions to learning about that data and from others questions in particular, Vicki, thinking about how to get at some of this geographic variation, and also the variation in other state and local regulations that affect some of these outcomes. It may well be from a policy perspective that one of the key rules

 for the CFPB is communicating and influencing state and local regulators. In any event, let me open

 as we still have a little bit of time, a couple of minutes, maybe enough time for a couple more comments, if any of the A.R.C. members have them . Anybody else in A.R.C. with the comment they are sitting on or they are waiting to unleash? If not we can break a couple of minutes early. We are pretty close to the end of the session anyway. Let me check the Q&A one more time. Thank you so much Feng for an interesting discussion. We are going to enter our break now. We will return at 3:30 PM Eastern for a discussion on research partnerships. Thank you again Feng.

Thank you all. [meeting on break until 3:30p.m.est]

Okay. Welcome back everyone. We are going to shift to our final agenda item today which is research partnerships. We are joined by experts from the office of research including Melissa and Patrick.

Thank you Josh and I thank everyone for sticking around for the last session of the day. My name is Melissa Knoll. Next slide. Before I begin as others have this presentation is being made by a consumer financial protection Bureau representative on behalf of the Bureau. It is not constitute legal interpretation, guidance, or advice and any opinions or views that we express may not represent the views of the Bureau. Today

 as I mentioned I will be talking about research partnerships and talking about the different types of research partnerships and what partnerships we have engaged with in the past. How we get the work done and established these partnerships and talking about the luminary results from two of our partners. Research partnerships at the Bureau usually fall into two buckets. Research pilots which come through research priorities or ongoing research ideas that we have over time. There is also innovation policies that drive some of these partnerships as well in which I will talk about briefly although today the main focus is these research pilots. You can go through two slides. Back one. So what are research partnerships at the Bureau. These are research projects where we collaborate with innovators to research the impact of financial products and services on consumers, and to learn more about what is currently happening in the field. An ideal collaboration involves sophisticated research methodologies that will hopefully allow us to test hypotheses and obtain meaningful results from real-world behavior. The goals following that is to understand the impact of products and services on consumer behavior and consumer financial health. Also further the bureaus initiatives like promoting savings which was a previous priority, as well as studying the effect of covid and protecting vulnerable consumers or any other priorities we which to engage in. As the acting director mentioned at the beginning of the day these have the potential to inform the bureaus policy work on what the topics are in the rigor of the study. Next slide please. There is various partnership types that we have engaged in and plan to engage in. Some of these are randomized field studies and experiments. There was one with American Express as well as H&R Block and those reports can be found on the website. There is a current project underway for financial education software providers. We have done experiments as well as descriptive studies to help understand Bureau tools , and there was a credit card study that looked at the relationship between the financial well-being using the bureaus financial scale and credit scores and other variables, as well as a study with Zillow to help understand the consumer shopping behavior around the mortgage buying process as well as helping us learn more about the home shopping tools of the Bureau. We have several data partnerships and one is currently with the community development Bank as a savings provider where we get the data in for the companies and able to analyze what is going on with the customer needs. Moving on just very briefly to innovation policies at the Bureau, these come about through an application process where financial institutions and innovators can apply to engage in any one of the following policies or programs. First is the trial disclosure waiver program. Under section 1032 the barrel has authority to grant waivers allowing and market testing of innovative disclosures. The Bureau can work with innovators to test and improve disclosures for consumers and industry. There is the compliance assistance sandbox program whereby companies can obtain a safe harbor for testing innovative products and services for a limited period while sharing data with the Bureau. There is a no action letter program that provides increased regulatory suit certainly through a statement that the borough will not bring a supervisor or enforcement action against the company for providing a product or service under certain facts and circumstances. Those that are interested in learning more they are on the bureaus website. So why do we engage in these research partnerships? The first goal is we want to understand what is happening in the field ? What is happening in the lives of real people and how do consumers behave and what products and services do they use? We also hope to evaluate financial products, services, and education materials to learn if a product or service can cause improvement or harm on meaningful consumer outcomes. Different types of partnerships very as we mentioned in earlier slides, and our goal is to seek and encourage partnerships that can generate casual in Florence. We see the value all the way up to these experimental projects. So you can imagine may be why the CFPB is interested in some of these. I mentioned some of these goals and we like to study effects of innovative practices on consumer outcomes, and we use these research partnerships to learn more about key priority areas. One important aspect is the publication of these findings. We are trying to get meaningful evidence-based information into the policymaking and research world. This is one of the main aspects of the research projects. Again you can find a number of these previous projects on the website. Hopefully we can potentially inform policy changes as they apply to the research partnerships that we worked on. So why do companies want to work with us? Some of these goals are overlapping as you can see in the green as those are, and goals between the company and the CFPB. There is other reasons why we hear from companies they are interested in working with us and one is this halo effect. They basically want to work with the CFPB , and we are never endorsing the company, but having this relationship will sometimes also spur further research interest and other financial institutions may want to join on when they see partners that are similar to them in the field and that kind of thing. Also often the companies that we partnership don't have the research expertise to engage in this type of research that is of use to them. We at the Bureau and office of research have experts in experimental design like complex data analysis skills, and a lot of the time these companies are using us in this partnership to kind of evaluate things of interest to them that relates to the next bullet related to subject matter expertise. Throughout the office of research particularly in my section we have a lot of background in behavioral science and human decision-making and sometimes the companies don't necessarily have as much of that. We are adding the research ideas. Again companies often are interested in policy changes, especially when there is the potential for regulation to be improved or to change and might be helpful to their company. Next slide. Anybody who has engaged in a research partnership knows it is a very rewarding experience. It can be difficult to get off the ground and often takes a long time to get from start to finish. This is one slide and boiling it all down into these few bullets, a lot of the time and effort goes into these research partnerships.

 First of all we try to make connections. These can come anywhere from as a computer has lots of connections with the field to our market team and our consumer education contacts in the other divisions in the Bureau. A lot of the time that is where we find these research partners, and it can come from all different aspects. Once we make connections with these potential partners we explored the partnership potential with the company. What are our overlapping priorities? Are we on the same page with what we are trying to learn. We typically generate many research questions and wait on the feasible ones from our end and your end. We also have discussions related to the partner capability and what type of data do they collect and what type of data do they share with us? What are the resources they can put into the partnership and what is their expertise and maybe different areas of expertise, combined to make a research partnership that might be particularly worthwhile . Once we decide there is potential and you want to go down the path of the research partnership with a particular entity, there is many logistical steps that we need to go through. We do our due diligence and check to see if the partner would be a good partner for the Bureau to work with. Then we start engaging with our legal team to write up a grievance and do a legal review so that we are all on the same page with regards to how we are going to get the data and what we are going to say and how we are going to publish and things of that nature, and these are formal documents that go back and forth between the two groups. We are obviously at the Bureau very careful to only take the data that we need for the particular research questions at hand and we work with the data intake team to identify the questions and to make sure we are not housing a lot of data that will sit there with

 specific research questions in mind. Throughout we are communicating with leadership related to the feasibility interest and the Bureau priorities. Next slide please. I am not going to go through this, but this is just to illustrate some of the research partnership that we worked on overtime at the Bureau. I mentioned American Express and H&R Block, and these was new to saving on prepaid cards and for financial being and credit reports. Patrick is going to go into these last two green lines on the bottom, and these are our most recent two current partners. Next slide please. I am going to kick it off to Patrick in a moment but I am going to give you a preview of what he will talk about. Right now we are engaging with two to partners on data partnership. These are studies where we are bringing data into the Bureau from companies so we can inform a previous Bureau priority area and still of interest. We are examining consumer experiences and interactions with the savings go product, and they answer questions a mutual interest like what are people saving for and what rules do people set up to help them save? Do some types of rules lead to a greater likelihood, and how is a saving related behavior change since the onset of the pandemic? What is interesting about these research questions that you try to formulate during the research partnership is they are very fluid, and we go in with specific research questions at the company that we are mutually interested in. As you get the data and explore what is and is not possible, it might change a little bit. This is where we are now and Patrick will give you some more information about the luminary findings from this exciting partnership.

Hello everyone and we can go to the next slide. Awesome. Thanks Melissa and hello everyone. I am a research scientist in the office of research and have been involved in the partnership work and I am excited to show you some preliminary results from the data partnerships. The first one we will talk about today is the southern band core and they have over $1 billion in assets and over 60,000 customers in underserved regions. They offer savings features like transaction Roundup, automatic transfers, and they also offer customers the opportunity to find their own savings goals to type in the name of what they are saying for and set in a target amount. They have share with us account balance information and savings information an individual account level specific transaction data between 2019 and 2021 for a sample of their customers. Here is some of the preliminary results. This figure displays median account balances at month end for all of the months that we have data. The Y axis is dollar amounts and this is for all 3365 accounts that we have access to and it includes accounts to have saving goals attached to them and accounts that don't have a savings goal attached to them. There is the declaration of the pandemic, and you can see to the right of that line the balance will peer on average to increase after the declaration of the covid pandemic.

 As part of this fluidity that we have these partnerships we are in an ongoing discussion to receive a larger sample of the customers, and if we end up obtaining the larger sample we expect some of the noise in the bars to decrease after the pattern to smooth out. Next slide please. This displays median monthly credit amounts or dollars flowing into the amount of the customers. Noticed a spike in April 2020 around the first economic relief payment went out. As before we see a slight increase in the bars to the right of the line compared to the bars

 and this suggests a slightly larger amount of money has been flowing into accounts after the pandemic rather than before. This shows here median monthly

 dollars flowing out of the accounts. Again we see a similar pattern where the bars at the right of the line are taller than the left suggesting the debits are increasing after the onset of the pandemic. Next slide please. We are going to go ahead and skip this and the next three slides. Just for time's sake. One more please. Thank you, that's perfect . We do have several remaining questions and right now we are engaging with a couple of specific questions. What trajectories to the customer account balance take overtime? Do they account balances increase or decrease or remain consistent when we are looking at the specific customer and account level. How did the pandemic affect these trajectories? They did take the shape of an rupturing that's back interrupting ? Secondly we are incident and how the economic payments and the child tax credit payment affects savings and spending. This is part of an ongoing discussion we are having about access the new data pacifically the child tax credits that have just started to come out. I'm going to move to our second data partnership year and this is with the savings app provider and this is an app that is very popular and has highly customizable savings goals that offers goals and rules customers can set for themselves. Some examples of the features that people might wish to customize include the target amount they would like to be saving and the target date they would like to achieve their goal, and customers are able to go in and can't attach a photo to the goal perhaps to motivate them for savings. Some of the automation examples are the savings rules of people set for themselves. An example maybe save some money for the payday where the amount of money is variable and able to be customized. Save every time my daily steps exceed 10,000 and save with every purchase I make at Ben & Jerry's. This partnership with us a large amount of savings goal data including the labels and the customers assigned and the amount and the target amount. Transfer of events and the savings rules the customers choose to apply. Next slide please. This is a figure displaying the 40 goal category label within the set we are working with. In previous work the partner used a machine learning algorithm to take the takes the customer assigned to their goals and categorize those goals to one of the 40 categories here. That top category here the most popular one is almost 140,000 unique goals associated with it. Some other are traveling vacation and there is an auto generated goal and gifts and transportation and etc. Interestingly we are able to track inflow and outflow and the rule types that people use and the target amounts and overrated transfers and transactions and more. I think based on these accounts we have sufficient sample size to look at savings across these 40 labels, and with the end, and we have access to up-to-date customer data in this partnership. Next slide. Now I'm going to show the popularity of two of these specific goal labels. These are up near the top of that figure. These are centered around the declaration of the covid pandemic around March 2020. First I will show the label emergency saving. The bars correspond to the % of all new goes created in a given month. That is a popularity of these goal levels. Note the increase in popularity for emergency savings around the pandemic. Next week and look at a similar analysis of goal popularity and this time for vacation savings. In contrast with the previous goal labels we are seeing a steady drop off around the pandemic. These two popular labels suggest a rise in emergency related savings and a decline in savings with the emergence of the covid pandemic and these are preliminary results and illustrations and it is a bit of a glance here to see the data taking shape. So as Melissa mentioned one of our main research question is what goals are most predictive of success in savings? Some specific questions that we have been grappling with in the recent weeks include how do we go about defining a savings goal success? Is it the total dollar amount saved? The percentage of a goal target a customer hits? Or is it how consistently people save with the goal? We are also pursuing a more top-down or hypothesis driven approach, and one example is something we have been discussing is looking at goals that might be motivating or fun versus more pragmatic goals. Something mundane like saving for a car repair. Another example of saving for a vacation prepare to an emergency fund as well as a puzzling behavior of saving to pay down debt, and

 this category might give us an interesting window into this behavior that we set aside money to later pay down their debt. Are the goals that are established with round numbers, like save $1000 more successful or less successful than goals with a specific dollar amount. The latter will suggest there might be a particular product or service in mind that the customer is saving for. Here is some takeaways and general themes from these data partnerships. To summarize the preliminary results we have seen today and soon after covid-19 was he an uptick in account balances an emergency fund related savings goals. This is a deliberate finding to be confirmed in both partner data sets. Partnerships really require flexibility,

 and this administrative data rarely fits uniquely into a specific research question. This goes back to the fluidity that Melissa was talking about. You might struggle to get specific transfers in ways that we didn't expect and certain transactions may be archived before a set date. There may be market timing around a specific target and goal the way people save without us being able to observe that. There might be issues of the samples that we are looking at. A company or business might change their model. An organization might introduce a paid subscription service, and there might be nonrandom fluctuations in customer basis for user accounts. I want to wrap up on this third bullet point with the lesson I personally have taken away while working with this partnership. I thought coming into some of these partnerships and somebody says data partnership that might look like a simple exchange where a partner hands of the data set and we hand back a clean analysis and report on their data. These partnerships have operated much more along the lines of a research partnerships, and the team meets regulate with both the partners to understand the data we are working with, to start the feedback results to the partner, to make sure what we are observing is consistent with the partners understanding, and we and rate slightly different sample approaches to help us run the analysis in a way most informing. The lesson I am taking away and learning with partnerships is that data partnerships are research partnerships. We can go to the next slide which will conclude my basic presentation and hand it back for Melissa for our discussion and Q& A.

Thanks Patrick and I hope you are all excited as we are to see some of this taking shape and very exciting and congratulations to everyone involved in all of these research partnerships. Moving to our Q&A with the A.R.C. members, as you can see the questions in front of you and if one sticks out, feel free because we have about 20 minutes, and I want to make sure that everybody gets to say what they want to say. How do we build on existing partnerships? As Patrick mentioned our two partnerships, they are data agreements, and how do we morph that and move it into questions around, the RCT testing, and how do we move into a pure data agreement into a more experimental approach?

Michael do you want to jump in?

Sure and thanks Melissa and Patrick for a very interesting presentation. I can see why you guys are salivating for the sort of arrangements. I guess my question, and probably a couple of questions rolled into one, I am curious about whether or not there is limits on these partnerships. We can imagine a lot of companies want to test some of these projects thinking they might roll them out at some point. These saving products are tied to various things. Are the results out of this, any aspects, when you engage with them, are you sharing all the knowledge and stepping back from the question a little bit, is the objection being able to disseminate what works and what doesn't? To encourage other source of savings program.

Great question. From our perspective we are in the business of evidence-based policymaking, and we are always doing these research partnerships with an eye toward disseminating the findings. Companies may not want to have their name associated with some failed tool or app. Part of what goes into these data agreements and other legal agreements is we state they are going to share the findings, but they have the ability to say they don't want you to put their name on it. That is not the case here, but as Patrick mentioned a savings provider or something of that nature where we reserve the right to disseminate but not ,

Just as a quick follow-up if during the course of a project they discover the secret sauce, it is too late at that point. That will get disseminated. I am wondering if there would be some hesitancy on the part of some companies thinking this would be a great product for us and we don't want the world to know too much, and we have had those discussion with companies.

That is a great question and I think you can be a back-and-forth about what we published. I think we stick to that we are not going to surround results or lie about anything, but I think there is certain things, ways that we can describe the data. Saying the number of customers that somebody has, we can work around some of the things that might be particularly sensitive. I have not encountered this and this is a good question. There probably would be some back and forth related to the way that we share the information's proprietary information or something of that nature.

I like to chime in and say I think these data partnerships are an exercise in relationship building and you think back to the slide that Melissa showed, and some of them we are starting with the potential and hope of transparency and good relationship building we can move more toward an evidence-based evaluation approach. Very fluid and ongoing with an end goal in mind, and we are doing our best to set up with the organizations we are partnering with.

Thanks.

Related to that anytime that we are going to go public with the finding or the company is going to say something, we have within those agreements, a time period where the other party will review, and I have not really encountered much, and some argument about whether not we shared things are not. There is this review period and nobody surprises me with the direction.

I have Tom and do you want to jump in?

I am a big believer in looking at the data, but to provide really good quality evidence-based policy, we have to have models and statistical differences among groups that we are looking at. In my own work with companies and state legislators and congressional staff, they are interested in pictures, and pictures are very important. Underlined the pictures before a picture can be shown I think it is imperative to say this picture is based on statistical differences. I hope that the A.R.C. can help provide, and we have plenty of PhD economists who are trained that way, and I understand the pull is to prepare a report yesterday. I didn't know until I started working with the research group, and I appreciate that. That is because it seems like we are always in a hurry to make a decision instead of taking the time to look at a policy or a question in a very deep way and build of a mosaic of a different result in many samples and see what seems to be going on in terms of consumer credit markets and etc. I am glad to see the emphasis or the shift turning toward building alliances with companies and academics, and to me that is a terrific thing to do. I hope the CFPB will invest heavily in adding more research capability over time. Thank you for your presentation.

Thank you for your comment. I can reassure you that we do have several economist and I am a psychologist , and we want to be able to get the first taste of the data out today. I hope we can earn your reassurance in the future that we have this statistical rigor to follow.

I am a big believer saying we have to wallow in the data that we have to look at and put it on a graph and see what types of things may be going on. The theory and the empirical are interwoven. I didn't mean to suggest that what you did was anything different than what I would do with the new data set. I am really glad to see you are pursuing collaboration with companies, and I hope to see more of it down the road.

Thanks. Terri you are next .

Hello everyone and thank you so much for your hesitation. I want to say one thing that I think has come across our conversation this afternoon which might not relate to your presentation, and I have been thinking with talking about credit and credit card utilization and the mortgage market thinking about saving strategies across the pandemic which has been part of a topic of the conversation, with how people are expressing financial distress, and I think to keep at the top of our mind how the pandemic hasn't been the only thing that has been happening over the last 1-2 years as we have had a big political shift, and of course unemployment and health concerns related to the pandemic, and a number of environmental things happening, and we are thinking about the distort flooding that Detroit is experiencing now maybe for a third time this summer. All of those things people are carrying on their shoulders or in their finances, and beyond the pandemic these things are happening simultaneously. More specifically I was really excited to see the data which shows, and I think you mentioned as a community development financial institution, I would categorize the depository institution, but mission driven and eight financial service provider, and it seems to be really committed to serving folks in the South, where black people are living and in rural areas to invest in arranged activities, and this seems to me like a fruitful partnership. I am excited to see it has developed, and in addition with the specific data you are able to explore together. I think the first question about how we build existing partnerships, and you have answered there seems to be an opportunity to build and be transparent, with the companies or with the groups, that you are working with because I imagine this could be the beginning and this seems to be the kind of partnership to develop, and the beginning of what this one might offer, should you be able to work in a way that serves both parties, and advance some mutually beneficial goals you might have. Looking forward in the future to see the future work that comes with it. So thank you.

Thank you and that will segue into the second question. What kind of partnership should we pursue as related to animal populations, and the project started as a savings related project and they are interested in savings. I am interested in what are some of the other areas or types of companies and institutions that you and others on the A.R.C. might think would be ideal for pursuing [indecernible]?

 I don't know if southern bank core was involved in the loan, and there is a range of activities around developing community loan funds, and blank black USA which is working on supporting black-owned banks and investing there. Also nonprofit organizations and it seems to be the sort of partnerships that is built off of this work in support of the priority area of the bureaus.

I know we had two others, and we are quickly approaching the end of time. I know Tony I saw you and Vicki in there. Tony, do you still have a comment or question or a response?

Yes. We all want people to buy insurance that will support their families if they die, and obviously major support of the family. Insurance that pays off if you die is death insurance. You cannot sell it and people will not buy it. Therefore we call that insurance life insurance.

 In order to sell insurance that pays if you live, we have to call that an annuity. As a professional economist, I regard this as problematic. On the other hand is social policy, it is absolutely essential because we want people to buy insurance that will support the families if they die, and we would like for people to perhaps consider supporting themselves in their old age. So this language thing is really important. Of course the people who are on top of that, we have the book nudge and I would use that as a model. When I am doing research I would not let the partnered defined what I do. I would get a research idea and then pursue the partner. The reason for that is I always tell my students when you are dealing with social science data, if you start with the data and try to find a hypothesis, you will find a hypothesis and it will usually be wrong. And social science data you get these false correlations that you don't understand. Your only hope with the truth is to start with theory and go out and recruit your partner. That is away that Baylor and sunshine did it. There is a bunch of guys who have been doing this in a different context. I have never done it but I would consult with them and follow their research technique. You get there idea of something, and here is one of my favorites and I will shut up. We would like people to deal with fiduciaries when they do their financial planning. To me the word science like someone you would go to in order to remove award. I went there and they got the warrant. I understand, come up with another word right? I bet you a lot more people would deal with fiduciary and come up with a lot better life outcomes. That is my advice to you and it sounds like I am kidding around but I am actually did serious. If I contacted , he would come up with some good ideas for you.

Thank you. We are aware of all of that research, and we agree, and I will say to my earlier point related to data sharing it fits in with that and we are always careful to have our policies up front and the Bureau doesn't take in all the data that we could possibly want, and it is guided by our research questions, and the type of data, and finding the research partners in the first place are guided by our priorities, and I take your plan and agreed.

It is outside of the scope of this particular topic but we run lab studies, and we will test the hypotheses in the lab and with a twinkle in the eye or an hypothesis that we hope to be able to test in a way they are motivated to help us study rigorously.

I think we had just enough time and Vicki, just enough time to get your comment or question in response before we close out. So how are you Vicki?

Thank you for a great presentation and I think this is very exciting. I had two questions. One is, I saw on your slide you are interested in getting toward RCTs which I think is really exciting. What type of appetite do the firms have for doing them? I would be curious to see, and I think that is a powerful tool you can use to test various hypotheses that you have . The other thing that I wanted to mention within the finance field a big trend is to try to collect data from a company that can be linked with existing data sources. To what extent are you trying to develop partnerships where you can link new data collected with some existing data sets that you have the CFPB to be able to answer new questions?

I can say a little bit about your first question for the stomach and tolerance for the RCT, and it is intriguing to me when you work with the firm or a company they are very quick to talk about their AB test and run them regularly and when you raise the idea of running a RCT they can get spooked or it might scare them. I think a large part of this is working with people and building the relationship in the way we are talking about before where you can propose something , and many companies and firms, meeting them halfway, and I think it is one step we can take to try and set those up. As far as my actually furious with these partners, they are still very new and away that we haven't raised some of those questions closely or specifically enough to speak to their interest in pursuing those sites.

Some of the partnerships I mentioned earlier on like American Express and H&R Block, they was RCT and we had success, and we didn't put it on here but there was another partner that we are working with and hoping to launch a RCT several months from now. As Patrick mentioned working with the company to see what they are, with and a lot of the time, getting a comfortable with the concept of a control group or withholding potentially what they think might be the best thing for their customer. We don't necessarily, and we can roll it out in different ways and it is an ongoing conversation. We have had good success in the past working on the RCT with other companies as well.

My biggest responsibility is to get us out on time. I am going to nail that part. Thank you very much Melissa and Patrick for really awesome presentation. Thank you everyone and A.R.C. members for your comment and questions, and we are now at time. With that I will adjourn the call today and Manny I will kick it back to you. Cement thank you Josh and I would like to thank my colleagues today and A.R.C. members we appreciate your feedback and comment throughout the day and I am certain the office of research has benefited from the engagement today. Thank you Josh for moderating the meeting and sadly

 they will be rolling off of the A.R.C. this fall and we appreciate your contributions and do not worry as we engage with our alumni and we have your cell phones and might be calling on you. Stay tuned for that and we are looking forward to working with the A.R.C. vice chair in the near future, and she will be becoming the chair later this fall. With that thank you all for connecting today. With that you may disconnect at this time. [ Event Concluded ]