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WEBINAR

FINANCIAL TECHNOLOGY: A HIDDEN PATH TO A HEALTHIER OUTCOME?

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PROCEEDINGS

MR. KLEIN: Good afternoon. I'm Aaron Klein, a senior fellow in Brookings; Economic Studies department in the Center on Regulation and Markets. Thank you for joining us here on this Friday afternoon to discuss the convergence of two very important factors going on in society that often aren't put together.

The advent of new financial technology commonly known as fintech and implications it has on health, on wellbeing in our physical, financial and mental health. I'm here today because I'm presenting some new research, the culmination actually of a twoyear project funded generously through the support of the Robert Wood Johnson Foundation that has some new analysis, some thought leadership, some questions and some policy analysis linking together and exploring these questions of financial technology and health especially pertinent in the era of COVID.

After my paper presentation, I'm going to be joined and questioned and walked through some of the findings here by CNBC's own Ylan Mui. And then after that there's going to be a panel of experts who are going to come back and engage in both the paper and the broader conversation and topic because this is an area where there's tremendous divergence of intellectual interest opinion and frankly, I think not enough analysis.

Because if there's anything that COVID and this experience has taught is that things are more interrelated in ways that we hadn't truly appreciated. And a public health crisis helps crystalize some things that had been hiding in plain sight.

Let me briefly start summarizing my research and my finding by answering the very question posed, which is can fintech improve health? The answer is yes. And I think I've identified three channels by which financial technology and finance and particularly payments in digital money impact health and health outcomes. And for this, I'm going to be focused a lot on payments and digital money, which I'll define in a moment. And questions about how it impacts health look through a culture of health and through a broad set of

social determinants of health.

These are frameworks that have been researched and explored in prior Robert Wood Johnson Foundation work and in others. And it kind of comes to the basic concept that lots of different channels impact health including income and wealth.

So let's start with the first of these three channels which is the question I want to start by going backwards in time. Twenty years ago, we're all together here. We're talking about this new technology, the internet. And we're asking ourselves, how is access to this new technology and all the benefits it can provide including substantial benefits to make our lives healthier. How is this going to be distributed? Who is going to have access and who isn't?

And the number one topic was of the digital divide was about access. Was the internet going to be at your home? Were you going to have good speeds? How expensive was it going to be? Was it going to be public free internet access? Well, this digital divided access today is largely gone. There's, you know, smart phone adoption is pretty significant. The amount of folks that are online are pretty high and not as correlated to income. Maybe a little bit more correlated to age.

There's clearly are some issues as they relate to data access. Less than half of Americans have unlimited data on their cell phone. And this plays into some of these financial questions that I'll turn to in a moment. But the real digital divide I argue is one of digital payments. You can get anything you want online. You can order your groceries, your food. You can hail a ride service. You can do all these things online, but can you pay with a cash or check at Amazon?

No, you need digital money. Access to digital money has replaced this divide in accessing this broad suite of technology that produces this. Now, how can I show you that access to digital money is an issue?

Well, the first thing we can do, and the paper looks at this, is look at how people pay and look at these trends. What you found over the last 20 years is a rapid

growth in debit cards. Cards of all forms, but primarily debit cards and some credit cards. A huge decline in checks. Growth in electronic payments. These are kind of direct debits from your bank accounts. Well, you've seen and some decline of cash, but not that much.

Cash is still king. It is still frequently used in a lot of transactions. And this is often hard for folks because what they fail to appreciate is the tremendous correlation of income and payment method. So some data from the federal reserve shows -- consider two households.

One is above \$75,000 in annual income. For that family, 93 percent have a credit card. About a third of all their payments are made on that credit card, and only about 16 percent are made in cash. Contrast that family with one earning less than \$40,000 a year. Only half even have a credit card. For those about 15 percent of their payments are on the card. Thirty percent are paid in cash.

Cash is most commonly used among people ages 55 and up and ages 18 to 24. The 18 to 24 group, a lot of folks that get back, say, oh, what are you talking about? Everybody I know is using Venmo. All the young kids are. But in point of fact, that's highly correlated with their income, their parental income, their socioeconomic status.

What you find in payments is an unusual correlation of age and as a place through geography in which the culture of cash remains quite large and the cost of digitizing money is high. One more point on cash. If you looked at the five boroughs of New York, you would find Staten Island and the Bronx are the most different on racial and diversity questions, but they're the most similar on payment methods of using cash compared to Manhattan and Brooklyn who are heavy users. This is replicated nationally. This is findings from data from Square: Iowa and West Virginia and Wisconsin use a lot cash, Utah and Virginia are highly digitized.

Why do I keep bringing up this difference? Well, if you don't have digital payments, digital payments, you cannot access all of these outcomes. And many of these outcomes provide health opportunities and you will see a growing inequity of health

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outcomes if you cannot access this. And it's not just a question of access. It's a question of at what cost?

This brings up the second of the different methods, which is the income effects of digitizing money specifically and accessing money more broadly. This helps reduce personal disposable income for lower income people. And actually, increases disposable income for the wealthy. You have a reverse Robin Hood system in our payments which has resulted in large income disparities and growing, I might add. That then through the income mechanism probably hit all the other different determinants of health which play through.

So let's explain some of this income phenomenon as it relates to the digitization of money and the accessing and speed of the payment system. So the first that I kind of want to go through in this system is the question of how much does it cost to digitize your money? Right, one can take cash or check and turn it into digital money by buying a prepaid card. One out of every 10 swipes at a register are from a prepaid card.

That cost somewhere between one to three percent upfront to take your hundred dollars get a general reloadable card. There are monthly fees. There are fees to check your balance. There are declining fees if you don't use the card the entire time. There's a question of how do you zero out the card, drain the last 30, 40, 50 cents. This is an expensive mechanism by which lower income folks have available to digitize their money.

Well, the second you say so you could just the bank account. It's true. Ninety-five percent of Americans have bank accounts. But the bank accounts we have are predicated on an income structure that gives you free checking if you always have a thousand bucks in your account. And penalize you with monthly fees, with overdrafts as your income goes lower and lower and lower, the fees become higher and higher. One out of 12 Americans pay \$350 a year or more in overdraft fees.

This report analyzes new data in a different way from the Federal Deposit Insurance Corporation survey of the on and under bank. And it shows for the first time that

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I'm aware of that the majority of people who use checks, cashing services. There are about 13,000 check cashing stores in America, one for every six bank branches. Seventy percent of those customers have a bank account. The majority of checks cashed at check cashers are from people with bank accounts. Why? Why pay 20 bucks or more for a service that your bank provides for free?

Let me ask you. It's Friday, 2:00 p.m. Eastern. You get paid. You get a little paycheck. You're out of money. You need to eat this weekend. You need to take your kids out. What do you do with that paper check? Do you take it to bank? If so, your money will be available maybe Monday, end of the day, maybe Tuesday. That doesn't matter for the folks who always have that 1,000 bucks in their account. But for the half of Americans who live paycheck to paycheck their go your overdraft so you go to a check cashing store, all right?

This scenario is played out over and over again. The flip side or growth in credit card rewards whereby the digital money used and spent by the wealthy translate into tax free cashback, one, two percent points, et cetera, that are growing. Ask the points guide online. And you ask yourself, rich people are getting richer by how they pay. Lower income people are paying money to access their own money. This is one of the reasons why it is so expensive to be poor.

And the more expensive those basic services are, the lower their disposable income is to buy everything else including healthcare, mental health services, dental health services. And this turns to the last of the three points in transmission mechanisms, which is how the government pays people in a time of public health crisis.

COVID came. And Congress acted very quickly. Before March was over in 2020, Congress had authorized emergency payments to everybody because the public health crisis of COVID highlighted the part of public health response to shutting down the economy is making sure people have enough money so that they can feed their children.

Well, 25 percent of Americans got paid with a check or with a card. Ninety-

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five percent of bank accounts, but 25 percent got paid with a checking card because the government did not know how to pay people. And among the people it did know, it couldn't pay them soon enough. Thirty-six percent of people were still not paid by the government by May 1. Six weeks after Congress had authorized the law allowing it. And two months into the pandemic. How are these people supposed to eat? Let them eat credit perhaps, right.

We've already looked at half of American families under \$40,000 that don't have a credit card. The government's public health response was predicted on the ability that they knew how to pay their people. Now, here we are. We've done five rounds of direct payment in the last 20 years. The '01 tax cut, the '08 tax cut and three rounds of COVID stimulus checks.

We now are doing something called the Child Tax Credit with monthly payments to millions of American families. It's supposed to lift millions of children of out of poverty. Huge health consequences to lifting children out of poverty. Yet, according to the Treasury Department by the first time they started giving these monthly credits, 12 percent, one out of five families weren't going to get it in their bank account because the government didn't know how to pay them.

After all of this, 12 percent get it in a paper check some time. Checks in the mail. And then what are you going to do with it? Sixty-six million dollars of Cares Act money, according to prior research, Dan Murphy from the Financial Health Network of the first round went to check cash.

As I close what are the solutions? Well, this central bank digital currency idea is interesting, but a new currency, a new form of digital money isn't the issue. We all have access to digital money. It's just a question of cost and expense and how that structure is set to create access to digital money. It's not about the form of digital money. Most people use CDC on a daily basis. It's commercial bank digital currency.

Your debit and credit cards are CBDC. It's just commercial not central bank too, right? If we have 95 percent of people with bank accounts a lot of the problems I've

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identified here are among people with banks.

Too often, we look at this framework and we just jump to the unbanked. And I hope my research has helped crystalize in this debate that there's a lot of low hanging fruit and simpler policy solutions to improve the lives of people with bank accounts so that they have a lot -- it is not as costly to access their own money. And these channels of payments have larger health consequences than have been previously anticipated.

With that it's my pleasure to call up Ylan Mui, CNBC's Senior Congressional Correspondent and expert on economic and regulatory matters, policy and politics. Ylan, thank you very much for joining. What did you think of all this?

MS. MUI: Aaron, thank you so much for inviting me to be part of this conversation. Thank you so much to the Brookings Institution for hosting this discussion today.

I think that your paper was really interesting. It was really innovative and I think that it connected two important issues of our time in new and different ways.

My first question to you though was if you can sort of walk us through what the different forms of digital money are? I know you said that the form maybe doesn't really matter, but I'm curious if the adoption rates among some underserved communities are different depending on the type of digital money that we're talking about?

MR. KLEIN: Absolutely. Thank you very much. When I define digital money, I'm talking about cards, debit, credit, prepaid. I'm talking about electronic online banking. I'm talking about other electronic forms of money, Venmo, Paypal. Physical money is anything that isn't electronic and needs to be digitized. The most common forms of physical money are cash and checks.

The very question of what is money if you'll let me get a little bit nerdy for a second. Often money is incorrectly defined as a medium of exchange. This definition comes from John Locke who is smart about a lot of things, but a genius of money, he was not. We can have a medium of exchange where you and I take each other out for lunch. It

is not money.

If you owe me a lunch that's an asset on my balance sheet, but it isn't money. Money is a system of debits and credits that have third party transferability without prior party consent. That is, I can give you my card and you take the money from it. I can wire you the money and you take the money from it. I can give you a dollar bill and you take the money from it.

It doesn't matter where that money came. How it came to me. I can't ask you to take, you know, Jen out to lunch because I owe her a lunch, right? That's the defining difference of money.

When you talk about a central bank digital currency or you talk about cryptocurrency or any of these new forms of currency. It's a new form of digital money. If it becomes money as opposed to just becoming an asset. There's a tension in some of these things. But what's important here is what's the system of debits and credits we're using? And how much does it cost for low-income people to access and move that money around and use it as money?

An that's the core finding here is that physical cash transitioning and digitizing physical cash and the system of digital payments we have adopted in society today is deeply inequitable with large and hidden costs both upfront fees and time value of money for lower income people. Kind of like a wash in the middle. And then actually rewarding, financially paying people to use their type of digital money at the upper ends.

MS. MUI: Why is that digital divide more that payment divide more important than what you described at the beginning? Sort of the traditional way we think about it?

I mean if you think about the number of people who own smart phones, for example. The number of people who can access those apps on, you know, on their smart phone, et cetera. I mean obviously a smart phone cost a lot more than an overdraft fee. So why is the adoption of the devices not the issue? Why is it the payment system?

MR. KLEIN: Well, I think they both have some sort of impact. It's not a clearly one or the other. We spent so much focus on adoption of the device. And then we just assume away the other things in large part because most of the policymakers involved don't ever pay those fees.

I am dreaming of the day that I deal with a senior bank regulator who paid \$300 in overdraft fees, right? I am dreaming of the day in which people go, hey, wait a second. Why don't you just move your money around on your phone. You know, well, you know, how did I get your money on the phone? How did I upload it from the bank account? What was the consequence? What happens on that Friday when you get a physical paper check? And how do you pay?

Economists are very good at assuming away inner temporal distortions. And say, I paid you on Friday so you're fine for the weekend. And if you can't access that money until Monday, you weren't actually paid on Friday.

MS. MUI: The piece of your paper is connecting this to health outcomes and to public health and why this is particularly timely during a pandemic. Tell me a little bit more about how you defined health and sort of those health metrics that you used to determine that this actually is having an impact on health versus just on sort of a broader livelihood.

Is it just not being able to access your Caltex credit payment? I say just, but that's something to me that says, this impacts every single part of your life not just the health outcome.

MR. KLEIN: So look, it isn't something that just effects health. But it does effect. So this is kind of an inclusive versus all source thing. I think we tend to unfortunately think about finance, financial regulation and then kind of everything else and we don't connect the dots.

And likewise, you know, I was going through one thing that listed a long set of social determinants of health. Housing, education, criminal justice, all these very, very

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important formative things that in the aggregate, you know, have been shown in different ways. And nowhere in there is listed financial services.

Nowhere in there is listed how folks access their money. And what I find is a very unequal playing field. So think about it, you know, to use kind of a Roselin criteria framework. Think about it, you're a kid, right? And your poor. And you're hungry and you need to go to the dentist. And your family is waiting on this Child Tax Credit that will lift them out of poverty. Will give them more money. Will give them the opportunity to meet these needs of you as a kid.

Now, seven out of eight of the chances, your family has a bank account that the government knows how to get access in. Has somehow figured it out and has started paying you directly. One of out eight, they don't. Keep in mind, 95 percent of families in the U.S. have bank accounts. So the majority of this one of out eight folks have a bank account, the government just doesn't know how to do it.

And those kids are sitting there waiting. Their parents are waiting for money. So what's happening? They're hungry. Their teeth are having problems. Their body is having problems. Maybe their parents are having mental health problems, right? And so, too often what I found in my research was that the assumption is, well, we have these income issues and income effects health. So we just need to raise people's incomes. So let's just, you know, give them money.

Well, that's great but you've got to ask yourself, how are you -- what is the technique upon which you're giving them money? And when you peel back that layer and assumption onion, all of a sudden it becomes clear. Uncle Sam doesn't know how. Or put a different way, it's very slow and this is the COVID factor. All right?

Congress authorized the first round of economic impact payments in March before even the numbers came out. I've seen some economist argue, we need automatic stabilizers because, you know, the federal reserve and autopilot can work faster than Congress. That's not true. Congress enacted the emergency payments before we even

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knew the March unemployment numbers. When the economy looked like it was still growing in February.

But there was this gap between the law being signed March 27th. The first payments going out April 15th and then these checks starting to dribble out in May. And this is a payment problem that can be solved with new and better financial technology. This is not a policy problem. It's not a will of Congress. It's not a legislative problem.

But you can't begin to solve and address some of these health consequences with policies and proposals that involve increasing people's money until you actually pay them. And that is the thing that I think I found that's a little different here.

MS. MUI: Is there a way to quantify or to correlate the cost of the payment transaction to the decline in public health or individual health?

MR. KLEIN: So I would love to be able to do that. I think that's a fantastic area for future research. The paper tries to look at some of these different metrics. I kind of look at the five boroughs of New York because I thought there was less factors to control for within these boroughs then say, trying to compare Utah and Iowa.

And it becomes difficult. I think it's difficult on microdata. I think because people haven't connected these dots before, they haven't started developing the statistics and the research and the dataset necessary to do that.

Interestingly enough, I think some of the fintechs may be accidentally compiling that data. When you look at some of these technologies that are getting people their money faster or giving them advances of things that they're owed, maybe you can start wondering and exploring, well, how are they paying that? Are they going to the pharmacy different days? Are they using prescription drugs, right?

There was some data on a prior paper, Mina Due (phonetic) and Lisa Servante (phonetic) published through this series that tried to look at whether or not people with certain income volatility and instability were using paid advance or early payment options to go to the dentist. And interestingly, one of the things that came out a lot was

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mental health. An important factor of health, but one in which is often uncorrelated. Hasn't been often addressed on some of these other factors.

MS. MUI: Well, Aaron, thank you so much for that explanation. I want to make sure that we have plenty of time to chat as well with our panelists. We'll have insights into both that question and so many other aspects of your paper as well.

I want to bring them in now. And our panelist are Makada Henry-Nickie of the Brookings Institution, Brian Knight of Mercatus Center and Jennifer Tescher who is CEO of the Financial Health Network. Thank you all so much for taking some time out of your busy schedules to talk about this paper and to share insights with us.

But, Makada, I would like to start with you to get your thoughts on the paper overall but also a little bit on the adoption rates of these different forms of digital money and the cost that some of these communities are facing in order to access them.

Your work has been focused on how to increase access to credit in financial systems amongst some of these communities. And so, I would love to hear your thoughts on the adoption rate of digital money in particularly.

MS. HENRY-NICKIE: So thanks for the invitation to join the conversation. I think Aaron gave me a lot to think about in reviewing this paper.

I have to say I reread it a few times and I had to go look and check the pyramid of social determinants of health to make sure I -- so where to situate this in our context.

So to answer your question. There's no doubt that we're moving from this cash-based society into this digital system. And, you know, whether you're concerned about how people are, you know, transacting and how that those payments are flowing through the banking system, the payment system. I think we really want to kind of step back and look at the drivers and also look at barriers and how people engage.

You know, particularly those are unbanked. The numbers are too large to sort of simplify and say, great. You know, if we digitize cash or we went to this digital

currency payment all of sudden we found a new lever that will somehow determine better health outcomes when I actually think that it's so much more complicates it when you look and see.

FDIC says just about 5.5 percent of people are using check cashing services. We know that they tend to be blacks, Latino. And digital Americans never really featured enough in these conversations, but they use these services the most, right?

But when you kind of peel back the onion, what are the drivers of these behaviors? Who uses what? And how they engage? It's income. It is income level. Income volatility, education and also immigration status. And then sort of like 32 percent needs cash checking, but so much more people. Forty-two percent use money order and sort of bill payment services.

So I think it's really important to, you know, before we jump to this new lever to think about how the system is changing? Look at these in a sectional demographic groups and engage on sort of broader systems, broader sort of policy ideas that go directly to their health.

Aaron is exactly right. When we're seeing people who are jobless, 8.2 million. The unemployment rate has gone down to 5.2 percent. But 8.2 million people are making a lot of tradeoff decisions. A lot of tradeoff decisions. Should I be spending a little bit of money that is left after the pandemic unemployment benefits expired in early September. What can I fit on the table?

I can pay for food. I can pay for utility. Now, I have to contend with rent, a potential foreclosure. Those to me maintain, you know, sort of key questions around who participates? How the underbound are faring? And it's not just this sort of simple idea about describing the transactions and linking it to this larger macroeconomic monetary question.

So I'm not so sure if I addressed your question, but I really wanted to bring in these larger substantive policy levers that are driving and shaping the risks of losing these groups or how they're financial wellbeing is shaping up.

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MS. MUI: If I can summarize perhaps your thought here is that cash is a choice for many groups for a variety of reasons. And that's why we have to look at those incentives.

Jennifer, if you want to weigh in here? What's your take on that? And do you see a connection between people using cash and their ultimately health outcome?

MS. TESCHER: Thanks everyone for having me and for being here for this discussion. And thanks to Aaron for both writing his paper and for organizing my organization and several others to contribute over the course of this series.

I think there's a lot to like about the ideas that Aaron shared in this paper. And there are, as one would expect, very consistent with Aaron's long held perspectives around the inequities that are built into the payment system.

I think though that as we think about the links between financial health and physical health as an example that it's more complicated than just payments. I think payments matter a ton, but they're just scratching the surface. And so, in that way I think I'm echoing what Makada was saying.

The choices that people make, the ways in which they behavior across a range of issues depend on a whole set of factors. People's lives are incredible complex and we are generally always trying to boil them down to what's the one lever or what's the driver or what's the reason? There's not one. There's not even two or three. There's multitude.

And so, sometimes I think it's less important to say, what is the one most important driver or factor? And instead think about the bigger picture. So for instance, you asked Aaron, Ylan, earlier what metrics you're using to determine the connection between payments and people's health?

We've actually done research to understand the link between people's financial health and their physical health. And back in 2019, our data showed that people whose health, physical health, had improved in the previous year saw a 1.8 point increase in their financial health score as opposed to people whose physical health didn't improve.

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And similarly, people who experienced a major medical expense had an average decline of 3.2 points of their financial health score year over year. So I think this connection between physical and financial health is bidirectional. And can sometimes end up in a negative downward spiral.

And I think the ability for people to turn their cash into spendable electronic money and the ability to have ready access to the money they have to pay for healthcare is a critical aspect. I just think it's one piece of a whole set of really important interconnections and drivers.

MS. MUI: Brian, we've talked a lot about sort of the users and the consumers so far in this discussion and conversation. I know you thought a lot about the providers of some of these services and the different cost structures that they face in trying to reach these populations.

What did you think of the research and do you have any thoughts on what this might mean for the industry as well?

MR. KNIGHT: Yeah, thank you so much. I enjoyed Aaron's paper. I thought it was quite thoughtful. I always learn something when I read his work. I don't always agree, but I always learn something.

And, you know, kudos to the paper for acknowledging that, one, you know, people make choices on the basis of things other than, well, it's just the lowest cost option. And, two, you know, I would have liked to have seen more. And this is like a great source for future research.

On how financial regulation shapes the nature of the services that are available because if regulation builds the certain box. The service providers are going to fit themselves to it. And that may have desirable or undesirable consequences. We've talked about overdraft a lot. And, you know, overdraft is highly controversial.

Part of the reason banks have shifted to overdraft is that regulation has cut off other sources of revenue. So they -- this is something they can do. It's something that to

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some degree they need to do because they have a regulatory obligation to be financially safe and sound. And so, and this is not meant to defend overdraft. It's meant to point out that like you can have an intended consequence of distorting a product into something that may end up producing new problems through well-meaning regulation to address old problems. I mean there's the saying there's no solutions only tradeoffs.

And I'm excited to see a lot of effort in the private sector to try to address underserved populations. I think we need to have reasonable expectations because to some degree, I think that we can see real improvement, but some of the things that strike us as troubling by a lot of these services, in particular high costs relative to comparable services provided to more affluent people.

Well, part of the cost structure in financial services is risk. And to the extent that less affluent populations present a greater risk of something like default, which would be more relevant in perhaps the credit context. That price is going to be or that risk is going to be baked into the price. Now, you can try to lower the cost structure through lowering risk and you see that with things like efforts to make better and more accurate underwriting.

You can lower it by lowering the cost structure in other areas either cheaper sources of capital, cheaper delivery mechanisms, less overhead. I mean, one thing that is perhaps underappreciated by things like paper monies. They're very high overhead businesses. They tend to be storefront businesses and there's a lot of overhead there.

If you could come up with a better delivery mechanism that's lower overhead that cost savings could lower your cost structure. And the other possibility would be something like subsidy, right? Which doesn't so much lower the cost per se as shift the cost as a social issue.

So those are things that are worth looking into and considering. I think that there's real promise here, but I think we also need to have reasonable expectations.

MS. TESCHER: Ylan, can I --

MS. MUI: Yeah, go ahead.

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MS. TESCHER: -- ask Brian about something? So one thing you didn't mention that I'm a little surprised about actually from an incentives structure perspective is the opportunity that the fed has to simply change the regulations on when people's money is available to them and/or simply moving to same day, if not real time payments. Because doing that should level of playing field to a certain degree.

Because it doesn't matter how much income you have if you all of a sudden can get your money faster. That's going to do a lot to help lower income people who have less access. So and then sort of bank account cost, if you will, doesn't even come into play. So what do you think about those ideas?

MR. KLEIN: So my understanding and I could be outdated on this. Is that ACHA is moving towards the same day ACH system. If they haven't moved there already. And the fed is pursuing a real time payment system. And we can debate whether or not the federal reserve should be running a payment system or not. And that's a pretty nuance debate and people's answers might be surprising.

But you know, within that context I think that that definitely could help, though. And I think Aaron brings up a good point here that if this was -- that to some degree in his paper, to some degree people with bank accounts are electing to use other services. And the question is why?

And some of it maybe, you know, for like check cashing availability of funds is clearly a serious reason. It's not necessarily the only reason. And, you know, so I think that's going to -- I don't have an objection to -- and agree that like speeding up availability of funds, which is where we're heading, should have benefit. But I also again, I don't think if that's the thing we do suddenly everything is fine.

I think that there are going to be other incentives and other issues that are pulling.

MS. MUI: Well, this brings up a really good point because as you mention Aaron did find that many people who use a check cashing system have an alternative which

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is, you know, their traditional bank accounts.

So this kind of speaks to this panel plea of I guess of services that consumers tend to avail themselves of. It's not just that they are locked -- they're not necessarily locked out of the banking system, right? They're using some banking. They're using some check cashing. Maybe they have some access to digital money, but maybe not quite enough.

Makada, I'm wondering if you can weigh in here and talk a little bit about how a business or how a company can cater to that because as you mentioned sometimes the reason why people are opting for these services is because the other things that are built around them like the ability to transfer or wire money, et cetera. So is there a different business model that needs to be considered here?

MS. HENRY-NICKIE: I think there's a set of questions we should be asking in addition to those, right?

What are the real drivers of people's financial wellbeing, right? So two things. The ability to own resources, own liquidity. And also, to access and control those liquidity levers.

And so, Aaron's paper had me thinking, well, for the employed are there opportunities for new technology or financial fintech firms to come in and reduce frictions, right? Reducing frictions I think increases people's -- consumer's ability to absorb financial shocks. And that's really important. And so, for example, the conversation between Jennifer and Brian just now made me think of some of the banks and credit unions that are offering this early paycheck program.

FDIC says, hey, it's income volatility. And so, if you're moving that payday closer especially those people who have paydays following on a weekend. Things get a little murky when something hits on a Sunday. It's really helpful to sort of smooth that cycle in terms of accessing liquidity, right?

And then going back and thinking of, you know, well, what are the other

drivers that drive these numbers around? Not just friction but who tends to be unbanked? The fees. The fee structure either it's too high. You know, a third of consumers say I don't have enough money to kind of maintain a bank account because it's a high minimum balance requirement.

And so, whatever monies I'm able to cobble throughout the pay cycle, it's eaten away by fees. So I need banks to sort of engage around this continuum of who can access the system and what are the barriers? How do we minimize them so that you can onboard people and keep them in the banking system?

It's not that we're, you know, moving the needle. As we're moving the needle and bringing people into the banking fold, we're losing people year on year just about 10 percent.

But I kind of want to ask a different set of questions around. Who's unlikely to participate? And how do we get them into the payment system? It's not just about income and employment and wages. It's really what about the big group of people who are in this sort of benefits market?

I think there is a role there for both the, you know, payment systems to flow through benefits and really help people to reduce these frictions. So for example, there are a lot of great apps, not enough, right? Helping to people manage their benefits.

Single point apps that let consumers -- just like their paycheck. Manage how much not? What are my EBT benefits? When are they due? How can I allocate and make, you know, rational rationing choices across, you know, the food that I have access to now that I got it at 25 percent bump from SNAP? And then I would say the COVID funds that we're using to back to work foolishly using back to work incentives.

Why don't you build out the functionality of these apps to embed ARCH, right? Job openings. Here you are managing your EBT alongside, you know, information around how do you, you know, what openings are available for you to get back to work? And then also sort of managing the risk of fees. Fee structure, timing, you know, we took

these issues on a decade ago, but they're still very much opaque and not fully accessible to the lay consumer.

If I made a purchase that did not come through by Friday, I'm not sure how much -- what my ledger should really read. There's a space for technology for us to come in here and say, based on what we've seen even though it hasn't hit, here's how much remaining liquidity you have. That moves them away from this overdraft, you know, cliff.

And then also thinking about, well, what's the role of agencies? These state agencies and reducing friction, making sure people can fully participate. It doesn't really matter whether you're earning income or you're collecting sort of social safety net subsidies at this point. How can these technology firms get involved and help state agencies to access the same kinds of datapoints for SNAP, for TENA to keep the system flowing over? And make sure that people don't fall through the gaps.

I think we need to broaden, you know, how we're thinking about Aaron's paper. He's posing a real important question here around frictions. Who is access and how we can have everyone or more people participate in this digital flow of transactions? And it's not just about what you control in your bank account, but it's also about the kinds of alternative sources of income that you're receiving and need to manage as well.

MS. MUI: So you mentioned the apps that help people sort of allocate their various benefits. What about companies like Chime or Zelle or Cashapp that actually offer, you know, very low-cost debit cards to some of their customers who may not have them already. Do they factor into this conversation at all? Or how should they factor in this conversation, Jennifer or Brian?

MS. TESCHER: I think that -- I'm glad you pointed that out because I think there is in some ways more access to payments or to basic banking than there has been ever. And not withstanding Aaron's point earlier about the friction involved in turning cash into digital, which I agree still exist.

There are plenty of prepaid and other kinds of banking products out there

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that are free or near free and are creating significant access. But I think that the point that Aaron is making is that even if you have a bank account or a card that is bank account.

It's great if you can get your government EBT benefits so your food stamp benefit that way or your child tax credit but what about say the money you earn from your job? Or maybe you have an informal job in the economy and are paid in cash. How do I get that cash into the account? I'm going to have to pay someone to put my money on the card or into the account.

And so, for me the most important thing that Aaron does in his paper is reminds us that this whole cashing a check which we somehow have created in our own minds as an evil activity is simply what happens when people can't get immediate credit for the money owed to them and they need the ability to get immediate credit. And that is not just about people who don't have a bank account, right?

That's about millions of Americans who are struggling financially who have significant income volatility who don't have savings. I mean a bank account is predicated on float. When you go to the bank where you have your account and you say, I'd like -- here's a \$200 check. Please cash this for me.

They're not cashing it for you. They're giving you what's available already in your account, your available balance. So if you walked into the bank and you only had \$100 already in your account, they're not going to give that full \$200 in cash. They're going to give you the first 50 or first 100. And you're going to have to wait a day until that other 100 is available to you.

And so, when I talked earlier about why making the payment system same day if not immediate is so important is exactly that reason. And it relates both to people who don't have bank accounts and people who do have bank accounts. And if we can fix that problem, it may make it more likely that someone who doesn't have a bank account sees value in the account.

Now, certainly there's issues of cost and there's issues of identification.

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There's issues of feeling comfortable. I'm not suggesting this problem alone will help solve the unbanked problem, but one of the reasons why people don't have a bank account is because they're not actually useful to them.

MR. KLEIN: So another thought on that is I'm struck by that there's so much capability and so much technology. And a lot of it is kind of in some respects sort of traditional and unexciting, but it's available. And I kind of wonder if, you know, and Aaron talks about some of the proposals out there for things like postal banking or direct fed accounts for people.

I wonder if we wouldn't be better served just having the government basically give people who, you know, are receiving benefits or having the government partner with a large bank to run a prepaid debit card program where you would have your VISA card. Your money would be in that prepaid account and you could deposit money at an ATM. So you know, they partner with J.P. Morgan.

You can go to a Chase ATM and put your cash in and get credit for it and that card.

MS. TESCHER: So, you know, Brian, the federal government does that today? It's called Direct Express. And it for federal benefit recipients. The problem is you can't deposit funds that aren't from the government because of your point earlier about risk and about, you know, your customer. But that seems like something that should be overcomeable.

MR. KLEIN: Exactly. I mean, you know, so rather than giving -- because, yeah. I knew that they had that for the benefits, but to have it to be more useful, right, where instead of recreating the wheel through getting federal agencies into the banking business -- like the consumer banking business which has, you know, we could certainly debate the merits of that, but there are some challenges.

Rather, you know, like leveraging what's already there, the infrastructure that's already there and smoothing out the cost points through subsidy. And again, that's

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another policy question that needs to be debated, but, you know, let's accept that there's consensus on that for the sake of argument.

And then, yeah, the other point would be the regulatory question. And we need to acknowledge that there's a tradeoff here. That the more regulatory burden you place on something, the more expensive it is going to be. The higher the cutoff for accounts that are just not worth the bank taking on for purely economic reasons. And you can address that through a bunch of different ways, but that's something that we need to acknowledge exists there and is a limiting factor.

MS. HENRY-NICKIE: Well, Brian, I want to jump in here. I totally agree with your point on when you increase regulation, you certainly have this market effect. I can suddenly push more cost onto banks. But banks then need to accept that if you're going to make a value proposition that these accounts are so low value for you to be bothered with to ensure that people can access a digital system then let the nonbanks play.

And don't just try to dictate how those the field, the playing field is then leveled. Let them serve because until Chime came in and Varo and others offering the paycheck two days early, I noticed these commercials. I didn't see Capital One and others playing this space.

And so, I think, you know, there has to be some give and take. Banks can't want to, you know, keep saying that it's too expensive to serve. Pull away the retail network from under the feet of these markets that we know depend on going to the bank to sort through why did I have an overdraft fee?

Older consumers and those who have face high income volatility. Visit a bank branch more than 10 times a year to sort through basic questions. Scams are on an all time high. So if you want to dictate how the field should play out let the nonbanks play and then let them decide what kinds of innovations that we should contend with both for customers all along the income spectrum.

MR. KLEIN: So I completely agree. I mean anyone who knows my work

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knows I'm actually very much in the banks need to back off and allow more competition and not try to erect regulatory barriers. I completely agree.

If banks are not able or not willing to serve the customers, we need to allow other players to come in to serve them. And the we in this sentence includes the regulatory system where we need to allow services to come in that can viably support people who, you know, maybe the economic value prop isn't there for your traditional unified universal bank, fine.

We do need to let something else to come in then that works. And we need to have a competitive market so that those customers get the benefits of competition.

MS. MUI: Jennifer?

MS. TESCHER: I was just going to point out that I mean I couldn't agree more. Banks want it both ways. They want to complain about regulation and then but not let additional competition in and claim that the competitors are not being regulated in a similar fashion.

I think Varo is a great example. Varo is a bank. It's a federally charter bank. And so, certainly regulatory burden particularly for very large institutions costs a lot of money for sure. But I think a bigger role here is legacy technology and a legacy business model. When you get to start an institution from scratch with brand new technology and completely new ways of doing things. And you are designing with the customer in mind, it's a completely different value prop. It's a completely different cost structure.

Now, having said, I do have to say these companies are also backed by gazillions of dollars from venture capitalists. And so, can afford to not necessarily make any money in the near term while they're simply growing share. So I do think time will tell about those broader neo-bank business models.

MS. MUI: So in our sort of remaining minutes here, I want to try to take it back to the connection between financial services, the payments and public health.

Do you all believe that the pandemic has helped create momentum to

either, one, recognize that these problems do exist? This divide does exist? And then, two, hopefully solve them or create the space and the demand for some of these new players?

MS. HENRY-NICKIE: I think it has, like Aaron's paper, sharpened our focus on these questions. And it's made us sit up and pay attention to who gets left behind because the federal government at the same time had to step up and respond to the needs of those who had been left behind in real time.

And so, it made us sort of think about not only those who earn income, regardless of how much that income is. And can transact and participate in a digital economy. But at the same time, how do we ensure that those that aren't earning income and depend on the social safety net, how do they participate in transacting in this economy since we need their demands to add to aggregate demand to get this whole system running and working together.

So I feel hopeful that we have all of the, you know, both sides of this equation thinking about different sides of this coin at the same time. You know, competition. And who is a part of this innovation process? Who gets to solve and offer the market new services and products? Is another place for optimism?

But the idea that we're thinking of both sides of the market, whose employed in a way that, you know, people who are unemployed and jobless that how they transact? How they receive benefits and the hurdles and costs associated with those frictions and that transaction proposition is I think again a good thing for us to -- a good place for us to be. And I hope we continue the momentum that both sets of the issues have shown us.

MS. MUI: Brian?

MR. KLEIN: Well, okay. So I feel like there's been way too much agreement on this panel so let me end with something controversial.

And that is I mean I think COVID has shocked us. Some of the answers as to whether or not this is going to be a permanent thing will depend on what the post-COVID economy looks like. Because I think Aaron's paper did a really good job of highlighting

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them. It's really on the digital side that the lack of access digital money becomes a real issue.

And if we're all transacting online because we're in lockdown or we don't feel comfortable that's one thing. But cash is the ultimately done. Cash is still highly used and highly valuable. And so, if we return back to more face-to-face economy that will have an impact. To be very clear, I don't think that means that the problem goes away.

The problem exists and it's real and it needs to be dealt with but the exact magnitude will I think somewhat vary on whether or not we see a secular shift in the economy towards online or whether we see an attack back towards more face-to-face more, quote, unquote, traditional transactions.

MS. TESCHER: I'll bring us home. I don't see us going back. You know, before COVID there were already a handful of stores that were saying, we're cashless, right? And that was a little bit controversial.

And then post-COVID with the notion that, you know, money might be dirty, right? There might actually be COVID germs on cash. We don't want to touch it. Sort of gave people a license to say, we're not taking cash anymore.

I also think that all of the stimulus in its various forms have absolutely helped reawaken people to the notion that if you can't either receive it or you can't access what you received like then tree falls in woods. And it's a little bit like the late 1990s when the federal government decided, yeah, we should just move to direct deposit for all federal benefits only to realize that there were these people who didn't have bank accounts. Oh, my gosh. Maybe we can't do that.

I feel like it's a similar reawakening. But now, it's not so much about accounts. That's important. But it's about am I receiving money in a way that I can actually spend in the economy? I think though the bigger legacy of the pandemic is the opening of people's eyes to this important connection between physical and financial health.

We knew it before, but boy do we know it know. And so, I agree that the

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social determinants of health, while they talk about a lot of different aspects that are tied to people's financial health. Financial health itself isn't codified, if you will, as a social determinant.

And I actually think that maybe one of the most important next steps as we think about the -- again, the intersection of all of these issues and solving them in a holistic way.

MS. MUI: Great, Jennifer, Brian, Makada. Thank you guys so much for the conversation, for the time, for the debate. Really appreciate it. Aaron, of course, thank you so much for your hard work on this paper and all of this research. And thank you so much, the Brookings Institution again for hosting this conversation. And hopefully, if you guys have any questions or want to rewatch it, it will be posted online for you to go back to it later. Thanks again.

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