

Federal Reserve Forum on Consumer Research & Testing: Tools for Evidence-based
Policymaking in Financial Services, November 9, 2010
Panel One: Exploring the root disciplines for studying consumer behavior

Daniel Bartels:

So thanks very much for putting this together. I'm really looking forward to learning a lot with all of the rest of you today. So John talked about some really important issues. He talked about attention being a very, very scarce resource. If he had more time would have talked about some of the challenges posed to us by the fact that people have present biased preferences and these are really important, really really important issues that have received a little bit of attention in discussions, policies, interventions, and regulation. I've decided to focus on a completely different set of issues in an attempt to try to offer a compliment to John's talk and so I'm going to be talking about specifically motivational influences on consumer financial choices and some of these have received a little bit sort of less attention in these kinds of discussions and rather than try to provide you with a complete comprehensive review of all that's been done in this area which would be impossible in 20 minutes, I'm going to try and focus on some sort of contemporary principles that I think are kind of thought provoking that have already given rise to some kinds of interventions aimed at helping consumers in the marketplace, services that exist and ideas about where other interventions might be.

So Jean asked me to try to provide sort of a view from 35,000 feet of what marketing and decision science have to offer us in trying to understand consumer financial choice and so what I'm going to do instead is sort of give you the view from space and then we'll take a stroll around one of the rather large neighborhoods that represents overlap.

So those of us who are interested in understanding decisions are really interested in understanding the antecedents of people's preferences and choices and the way that we go about doing this is we often identify a normative model. A normative model is usually how you know a fully informed rational actor would decide right the assumptions that you know many of you take to be valid assumptions, descriptive models we develop those and contrast those with the normative models. These descriptive models are based primarily on psychology right what we understand about consumers choice processes and when we understand the descriptive well enough in some cases we're able to offer prescriptive models, we're able to offer suggestions about how consumers might improve their choices. Marketing has a bit of more of an applied focus right the idea here is you want to match people with products and services and the approach here is to discover or in some cases, you know, if you're marketing is sowing to create people's needs and once we understand what those needs are right we want to guide the design and presentation of products to align them with people's needs. And so what I think is kind of an interesting nexus between these two highly interrelated fields is that in those cases where we can identify a prescriptive model, where we understand what's going on well enough to offer some suggestions about how to improve people's choices. We may have discovered needs that consumers have, in some cases needs that consumers recognize that they have and so that's kind

of where the focus is going to be today. So I'm going to talk about some existing services that are aimed at addressing consumers' needs along these lines and then I'll talk about motivational principles and other ideas about where we might be able to develop some of these things, interventions that target you know long term financial goal setting and sustained goal progress. And then if there's time at the end I'll talk about some of my own research which has been focused on this idea of whether we can get people to care more about their long term financial well being.

So this is a very, very broad overview slide and it's almost un-needed right so what the idea here is that for what it means for a consumer to have a long term financial goal and to successfully reach that goal means A they set a goal right and I'll go over some demonstrations that planning and commitment are an important part of this process. Secondly, I have to make progress on those goals and what I'll show here is that markers indications of progress are themselves motivating and increase likelihood that people get there. And then of course people encounter difficulties along the way. You want to save more over a long period of time, you want to spend less over a long period of time, you want to be rich in retirement in retirement you're going to encounter difficulties over time in anticipating and sort of preemptively dealing with those difficulties is important for reaching your long term financial goals. So the first principle here is that planning matters a lot. So John Lynch and colleagues have an interesting paper in which they've developed an individual differences index that measures people's propensity to make short term and long term financial plans. So like John was saying everybody in this room is going to be in the far right tail of this distribution where people that are probably more likely to make long term financial plans and it turns out that this metric is predictive of people's economic behaviors so the finding I think that's easiest for most of us to engage with is that people who are more likely to make long term financial plans have higher credit scores. So it's not just having plans you have to make specific plans, you can't just say I want to be rich in retirement, right the idea is if you want to get there, you want to be able to spell out the steps that you use in getting there and if you think about the services offered to consumers by financial planners this is really where almost all of the value added is. And so the idea is making specific plans about not only where you want to be but how you want to get there matters because it's a way of getting people to anticipate and cope with difficulties before they sort of hit them in the face right. And so there are tons and tons of demonstrations of this in psychology and literature I think one of them that's sort of easy to convey is if you call people up on the phone and you ask them what time are you going to vote and how are you going to get to the polling station there's a paper that shows that this is more effective this boosts voter turnout more than other kinds of traditional, promotional get out the vote kinds of campaigns right. Just proactively thinking about how you're going to get there, anticipating and coping with difficulties. And then finally it's not only economists that recognize that incentives matter, incentives matter a lot right and so there are actually services that exist that help people to align their incentives with their commitments in kind of an interesting way. So the example here is Stick.com, this is a service that was developed by some Yale economists and what Stick.com allows users to do is to set very very sort of costly

commitments right they get to stake resources to their plans that if they fail they've essentially raised the price of bad behavior. So my first exposure to Stick.com was when I had a friend who was only sort of marginally successfully writing a dissertation he logged on and he got me to log on and he said ok I'm going to submit to my friend Dan, I'm going to submit to him 7 pages of dissertation by 5pm each Friday and if Dan my appointed referee doesn't login by 5pm on Friday and tell Stick that I've done this then 25 of my dollars will be transferred to the fund of a political advocacy group that I really despised right. And it happened to be one that I didn't really like all that much either so in the rare occasions where he failed it was actually pretty painful for everyone involved. But the general idea here is that people are doing this at cost, people are willfully adding costs to failing and this is one way that we might think consumers might better help might better reach some of their goals and in fact there's evidence that this does matter, that it affects economic behavior in the field so some commitment devices based on exactly these principles were offered to people in a rural part of the Philippines and it was found that these kinds of commitment devices drastically increased savings rates.

So the second principle motivation is that where you are along a goal matters a lot so there's kind of a dynamic property of goals and a lot of literature on this relates back to a very old theory the goal gradient hypothesis. So Hall discovered that organisms exert more effort the closer they are to actually achieving some goal. Right so the idea is if you put a food source out here, you put a rat out here and you have equally spaced markers along the runway, the rats run faster the closer they get to the food source. Right in human beings this is manifested as the idea is like the closer you get to a goal it feels good, you feel a sense of accomplishment when you complete a goal and effort drops off thereafter. So this principle has been studied pretty extensively in the context of consumer loyalty programs by my colleagues Ron Kibbitson [assumed spelling] Polar Gaminsky [assumed spelling]. So what they did in their studies is they offered many, many, many people over 900 redeemed cards like this so they offered people these you know buy 10 coffees and get one free cards and what they did is they measured the time between purchases as you moved along from stamp one to stamp 10 and they found consistent with the goal gradient hypothesis that the closer people got to this free coffee the more frequently they were purchasing coffee. Right but here's the more interesting affect: So some of the people got a card with 12 spaces per stamp so they got two bonus stamps right, so they still have to buy 10 coffees to get to the free coffee but now they're provided with this illusion of progress, they're provided with this idea that you know they're not in a starting box, they've got a little bit of a head start on their goal and they found that people actually were more quick to purchase 10 coffees in this case and this case. So of course this is an intervention that's aimed at extracting money from people, it's aimed at getting people to spend money but you can think about flipping this on its head right if you're a financial services institution you want people to save more money, I mean you can use some of the same principles getting people to define an explicit discreet goal and give them some reason to believe that their not at the starting blocks but that they've got [inaudible]. And then finally on this part of the talk people encounter difficulties and in some domains we know that no matter how hard we try we're not going to do as well as we wish that we could so the idea here is if you

can self regulate automate. So I know of at least two goods that exist primarily because people recognize that they just can't do what they want to do right so the idea here is that people are walking around with at least some sort of fuzzy idea in their head about what the life cycle hypothesis suggests that they should be doing with their portfolio. They know they should be more heavily invested in equities when they're younger and that they should mix in more fixed income when they're older right, but knowing that and doing that are two different things. And so I think that's why target date funds, or that's at least one of the reasons why target date funds exist right so they provide consumers with diversification, they remove a lot of the guesswork in this process. There is sort of so, I think on balances these are probably an ok idea that most consumers are probably better off doing this than doing what you know what they would do left to their own devices but it doesn't mean that they should make this kind of a purchase mindlessly right. So these are the glide paths that the funds offer in the market make so you can see that each of them reduces its position in equities over time right but that there's a huge disparity in the funds that are on offer in the market so people ought to know what they're investing in but again given that people don't rebalance and people don't dynamically shift assets over time, they don't think about the risk tolerance, my hunch is that many consumers are better off doing this than not doing this right.

I think the jury is still out on services like this but I think that they appeal to a very similar need for consumers right so many consumers are walking around thinking man you know I wish I could save more money, I want to be saving more money, I'm just not living up to my savings goals, so banks have offered these keep the change like programs where you make a purchase with your debit card, they round up your purchase to the nearest dollar, they transfer that into savings and for some of these banks some of them do a little bit of limited matching, right some of them match your funds up to a certain amount. And so I think like this this is appealing to a need that consumers have. Consumers know that they wish you know they wish that they were saving more money than they were in the same way they wish they were doing with the life cycle hypothesis suggested they should. I think that the major issue with services like this well there are a couple of them. One is that the way you save more money is by making more purchases and those two don't necessarily go together. It may be you know that saving 30, 50 or 80 cents at a time won't make you a rich elderly person and potentially you know the worst potential outcome would be people felt like they were saving more by making more purchases with their debit cards and they sort of ramped down their savings in other domains I think that would actually leave them in a lot of trouble right. So I don't know that that's happening, I'm saying the jury is still out on these, but the point here is that both of these services exist in part because consumers recognize that they have these needs and these needs are being met in the marketplace.

So John talked about primarily sort of cognitive and some emotional antecedents of financial decisions and some things that we might think about to cope with people's limited attention. The first 70% of this presentation was focused on ideas about potential goal based interventions that

target the dynamics of goal pursuit and if we think hard about these you know we can try to sort of maximally leverage people's bounded will power or substitute for it when people know they're just not going to be able to do it.

So finally in some of my work with my colleagues we're trying to address this question of whether or not we can just increase willpower right, whether or not we can just make people care more about their long term financial wellbeing and so the question is why do you care about your future self? Well you care about your future self because it's you right. The you that exists in 20 years is the person that is ultimately going to suffer the positive and the negative consequences of the total accumulation of all of the decisions that you make, right. And if you think about it on a narrow sort of self interest account the only the strongest rational reason that you would have to want to you know sock away some of your current income for consumption and retirement is the idea that you know benefits to your future self can compensate for burdens imposed on you now in a way that benefits other people just can't right. And so what we're doing in this work is we're trying to leave people with the impression that this distant future person is really them or maybe not so much them and seeing whether or not that affects the way that they make financial choices. So to give you a flavor for the kinds of work that we've been doing here's a study that I ran with Polar Gaminsky. We approached a bunch of graduating seniors a week or two weeks before college graduation at the University of Chicago. We had them read a short passage that told them look college graduation is a major identity changing event, you're going to be a fundamentally different person as a result of having gone through this experience or it's not such a big deal right. And then we gave them real choices between chances to win gift certificates of different values. We told them by participating in this study you've been entered into a lottery to receive a gift certificate so we're going to randomly select one questionnaire, we're going to randomly select one of your 8 choices, if you win you get it right. And so they're offered the choice of receiving \$120 value gift certificate in a week right after the drawing is held, or waiting a year to receive a gift certificate of larger value right. And the idea here is that if people are lead to believe that their identity is going to change as a result of this experience that they're going to have right they should be more impatient, they should want to serve their current self and not care so much about providing for their future self because that's to some extent a slightly reduced version of them right. And so that's what happens so people who read about large changes in their identity are significantly less patient than people who read about small changes in their identity right and we find this also correlationally, we find that people who sort of spontaneously rate themselves as being more connected to the future self are very, very patient, even after controlling for lots of psychological factors. In a survey that we ran with a large bank we found that controlling for lots of demographics and financial variables we found that people who were more highly connected to their future selves were more likely to have their income direct deposited into savings rather than into checking, they had more negative attitudes towards discretionary spending. But in terms of thinking about interventions right, making people feel more connected to their future self makes them more patient, it results in them setting more responsible financial goals, it results in reduced likelihood of making

discretionary purchases which could over time you know threaten your long term financial well being and it induces people to set more self improvement goals and to better maintain them over time.

So summary of the key points that I hope to have conveyed to you today: For a consumer to have a long term financial goal and to meet that goal means that there are several important component parts right and each of these components represents a potential target for an intervention. Planning and commitment matter so specific planning helps people anticipate and cope with difficulties, commitment contracts are one sort of I think kind of interesting way to increase the cost of failure, make people better at not failing. Feedback on progress is an important factor right so letting people know that you're part of the way there can help motivate them. People have bounded willpower and ability to execute so there are already some services that some goods that exist that appeal to those kinds of needs that people have. And then finally and you'll see a lot of these same themes about your connection to your future self when my friend Hal Ersner-Hershfield talks in the next panel increasing people's in some of our work we're trying to basically bolster people's connection to the future self in hopes that it bolsters their motivation to provide [inaudible].