



PODCAST TRANSCRIPTION SESSION NO. 265-SALLY TAYLOR

Welcome to the Lend Academy Podcast, Episode No. 265. This is your host, Peter Renton, Founder of Lend Academy and Co-Founder of LendIt Fintech.

(music)

Today's episode is sponsored by LendIt Fintech USA, the world's largest fintech event dedicated to lending and digital banking is going virtual. It's happening online September 29th through October 1st. This year, with everything that's been going on, there'll be so much to talk about. It will likely be our most important show ever. So, join the fintech community online this year where you will meet the people who matter, learn from the experts and get business done. LendIt Fintech, lending and banking connected. Sign up today at lendit.com/usa

Peter Renton: Today on the show, I'm delighted to welcome Sally Taylor, she is the Scores Vice-President at FICO. I wanted to get Sally on the show because there's just a lot of activity happening in credit scores this year with the pandemic and the forbearance programs. Sally has decades of experience on credit scores so I wanted to really get her perspective on what this all means, what historical precedent we can look at when it comes to credit scores and she does give some really great ideas, great solutions there.

Also wanted to talk about the new product that FICO released earlier this year called the FICO Resilience Index. It's very pertinent right now because what it really does is it helps lenders understand consumer sensitivity to economic stress and let's face it, many consumers are under considerable stress today and this allows lenders to really continue to lend confident in the fact that the 680 FICO now is going to be a 680 FICO in six months time or in 12 months time.

So, we go into that in a lot of depth, talk about how it's built and what it really means; we also talk about data science, in general. We also talk about what Sally is finding most interesting today. It was a fascinating interview, I hope you enjoy the show.

Welcome to the podcast, Sally.

Sally Taylor: Thank you for having me, Peter.

Peter: My pleasure. So, I'd like to get this thing started by giving the listeners a little bit of background. I went to your LinkedIn profile and I see you have spent your entire career at FICO so, why don't you tell us a little bit about how your career has progressed then.

Sally: Sure, sure. I am a veteran of over 30 years in the credit industry and the industry of analytics and data science. I started as a Data Scientist straight out of school with my Statistics degree in Berkeley and I was part of a original management team of the FICO scores, that would have been about 30 years ago.



LEND ACADEMY

We just celebrated the 30-year anniversary of the FICO scores and I led the product management to marketing teams so I was part of a lot of the adoption in the early years of designing and re-designing the FICO scores. And then, as you said, I've continued to work at FICO, I headed up product management for FICO scores for about ten years, I've done other things at FICO including managing other software products and so forth. About five years ago, returned to the Scores Team to head up the B2B Scores Team.

Peter: Okay. So then, how revolutionary was it? I imagine, we take it for granted now, because everyone knows about FICO scores, but how revolutionary was it at that time, did you know that you were going to be changing credit forever?

Sally: We knew we were going to be changing credit, but I don't think we expected everything that came down after. So, we knew what was revolutionary is that by building a score, a credit score, to reducing the data at the CRA, we were building a model that leveraged the experience of all lenders, right. Whereas before that, it's common and it's still common, is that lenders have their own custom models, the proprietary models that they developed using their own historical experience.

What the FICO scores did was it allowed every lender, not just the large ones, because at that time it was mainly the large lenders that used analytics like credit scoring. It allowed even medium-sized lenders and small lenders to take advantage of the tool that allowed them to manage risk better, but also, you know, lend in a more fair way and make credit more fair and accessible.

Peter: Yeah and that certainly has done and I know that it's been a.....it's got into the general population, I mean, most people now have some idea of what their credit score is. That certainly wasn't the case even I think ten or 20 years ago. So, let's just talk about the credit scores today because it feels like there's been somethis has been a challenging year, let me say, I mean, you've had a long career with FICO and I'm sure you've never seen a year like this before. So, tell us a little bit about how you are thinking about scores today given the unusual nature of what we're going through.

Sally: Right. It's still a little too early to know the full impact, right, of this economy and we're still fairly early into it and when it comes to credit scores that are derived often using, you know, data at the CRA, there's a lag before information hits the credit reports. So, we're just starting to see some of the trends there in terms of accommodations and so forth, but I think it's helpful to look back, since we've been doing FICO scores for 30 years, we have the experience of looking at FICO scores after the factafter the Great Recession, after natural disasters like Hurricane Harvey and we learned a few things from that.

One is that, you know, credit scores still rank order, so the point of a credit score is rank ordering, it's not intended to be a point predictor of risk, it's not....680 means, you know, exactly this default rate, but what happens is as the economy shifts, goes through cycles that relationship between the default rate and the score will shift over time. For example, in the Great



Recession, it pretty much doubled across the board. Delinquency doubled across the board, whether they were high scoring or low scoring, but we still saw that the scores rank ordered, that the people who scored higher performed better than the ones who scored lower and so forth.

So, credit managers, especially those who've been through economic cycles, are fully aware of this pattern so they know that they need to monitor very carefully and really understand what's happening in segments with this particular economic downturn, but, number one, scores still rank order, there will be shifts in the odd score. The other thing we've learned from the past economic impact is that overall score so shifts quite as much as people expect them to.

Peter: Right.

Sally: There will be some where their scores go lower because, you know, they were personally impacted, however, as an overall.....I mean, scores look at a lot more than just risk and delinquency, right, they look at the whole history, they look at balances, they look at how you manage your credit overall. So, it's not as much of an impact as people think and we've seen that from the past.

Peter: Right. So then, right now, there's all sorts of forbearance programs that are happening. Pretty much every single lender has had some kind of forbearance, some of them are running their course now, but given that they were not allowed to report the.....you know, someone may have been delinquent but in a forbearance program so they were not reported to the bureau so their score was unchanged. They may have lost their job, they may have no savings, they may be living off credit cards, so how do you sort of factor-in the forbearance programs in the scores.

Sally: So, in terms of how the forbearance programs.....you know, how the score reads the forbearance programs, the scores are looking clearly at the status, the delinquency status and so forth. So if a lender is doing what they're supposed to be doing, right, if they're following say the CARES Act and other guidance, if they make an accommodation, they should report it as "paid as agreed." So, they shouldn't report it as delinquent, based on what the original agreement was, they should be based from what the accommodation is and so that should not impact the FICO score at all.

Even if they put in a code that indicates that there is a forbearance, the FICO score doesn't look at that code and there's a very good reason why it doesn't look at that code. That code is, generally, only there during the time of the disaster, right, during the time of the event. And so, if we factor that information in then at some point that code's going to come off and there's going to be the huge shift in score if we were to actually, you know, look at that code or interpret that code to mean, you know, this person shouldn't be delinquent even though it sounds very delinquent. So, it's really important for lenders to actually report the status the way they have agreed in the accommodation.



Peter: Okay. So then, what do you think your take is on the overall health of the consumer today, I mean, we know the government programs gave run their course, it seems that there's not much movement in Washington right now for a new stimulus package and we're obviously less than two months from the election so that factors it all, but given the unemployment programs, the stimulus check, they're now all in the past and more than a month has gone by since those have ended, what's your take on the consumer today?

Sally: Right. Again, it's too early for us to have a read, we just recently received snapshots of data that will show the very earliest reads of, you know, the amount that are under accommodation, so forth and we're preparing that information actually to present later at LendIt. So, Dave Shellenberger from FICO is actually presenting on September 30th in the Consumer Lending Track and so he'll be prepared to share what we're seeing in the very early snapshots of how the FICO scores and the FRI scores that we'll be talking about are performing.

Peter: Right. We look forward to that and thanks for the plug there. (laughs) Let's talk aboutyou just touched on it, I want to talk about the FICO Resilience Index. I'm sure when you were probably putting this together, you had no idea there was a pandemic that was going to hit and it was going to become a very important piece of information for lenders. So, maybe you can start by just talking the origins of the FICO Resilience Index.

Sally: Sure, sure. You're right, we had no idea that around the time we were launching this we would be heading into a pandemic, however, we knew, as every credit risk manager knows, that there will be economic cycles that will pinch in you, ups and downs, you know, that lenders need to manage too. So, we've actually been working on various types of solutions related to managing through economic cycles for decades. So, this particular solution, the FICO Resilience Index, came about because credit managers, typically, even in a benign economy they have to factor-in the fact that at some point there will be an economic downturn.

So, you know, they actually price that risk in even when the economy is pretty good so what we have credit risk managers ask....we know that when the economy turns down there will be higher risk at every score band, right, just like what you said before in the Great Recession, it was about the double, the default rate in every score band.

Can you tell me which of the 680's are the ones that are going to go bad and so we set out to answer exactly that question. We researched, can we tell from, you know, from a benign economy to a recession, can we tell the type of consumer that would perform very similarly in the two scenarios versus the ones that have performed very differently and be far more sensitive to being in a recession and that's exactly what the FICO Resilience Index looks at.

Peter: Okay. So, maybe can we dig into that a little bit and talk about how because, as you say, not all 680's are created equal and this is trying to address that very issues. So, what kinds of things are you looking at that really will give you that indicator?



Sally: So, what we're seeing is....first of all, the FICO Resilience Index looks at the same underlying data as the FICO score. It looks at the information on the consumer's credit report, it just looks at it differently and it's designed differently, it's designed to predict a different outcome, it's designed to predict who's likely to be very different in a recession than they are in a benign economy which we call sensitive to the economy as opposed to resilient to the financial stress. So, it looks at the credit report, it is used in conjunction with the FICO score because you still need the FICO score to tell you what range of risk is there.

But as you point out, if somebody is 680there's more than one path to 680, there are different ways that someone can be a 680 and what we see is the ones that are more resilient have more experience with credit, they aren't taking up a lot of new credit, they might have some delinquencies. Delinquencies really doesn't have as much of a play in the Resilience Index as it does in the FICO score so it's really about how one manages credit that tells how resilient they will be in that downturn. So, the more sensitive ones will have a more newly opened trade, less a variety of credit just because they just have less experience on credit.

Peter: Right, okay. So, I presume you back-tested, like the 2008/09 recession data so you can see that this.....obviously, you have all the data, I imagine, going back decades so when you have a recession....you said that with the data that's still out, we will know in a couple of years or even next year much more information about this current recession, but let's just go back to 2008/09 so when you pull the information through the Resilience Index, what's the difference? Is it a 680 going down to a 610 or a 680 going down to a 675, is that kind of...what's sort of the level of outcomes that the Resilience Index would give you?

Sally: That's a great question. So, the Resilience Index, first of all, it scales from one to 99. It just didn't keep it so it doesn't look anything like a FICO score and it's also the reverse in terms of scale so lower is better. So, one is the most resilient score you can get and a 99 is the most sensitive score you can get. What we do is we look at it in conjunction with the FICO scores, we look at it within small bands of the FICO score and so, it's exactly as you say. What we see is in a benign economy, we actually don't see any difference within a FICO score band based on the Resilience Index because what the Resilience Index is measuring is latent risk, it doesn't manifest itself, it doesn't show up until there's a recession.

Peter: Right.

Sally: So, if you look in a good economy, you're going to see that the rank ordering of those FICO scores and then within the FICO score bands, you're not going to see any rank ordering of the FRI, but when you go into recession, again, you'll see the rank ordering of the FICO scores. So, within the FICO score band, you'll see a rank ordering of the FRI where, depending on how extreme the recession is, to your point, the differences could be...like say the most sensitive person could be like a 60-point/80-point difference in what their FICO score would indicate.



So, the odds of repayment are significantly higher to the tune of what would be like a 60 or 80-point FICO score. We actually have benchmarking reports that come out of the overall data so lenders can actually see what we mean. What happens in the benchmarking reports are set to the Great Recession just to give a test, what we tested and validated on other economic kind of more minor downturns and you still see that ring quartering of the FRI, it's just not as dramatic as you saw with the Great Recession.

Peter: Right.

Sally: To your point, now that we are currently in a recession and not sure how long it's going to last, this is a time for lenders to, you know, actually monitor what's happening in this particular recession to see how dramatic the difference is compared to say other recessions or the Great Recession.

Peter: Right, right. So, let's talk about that, let's talk about the lenders because, I imagine, a lot of lenders....you know, a lot of them sort of really scaled back their lending at the start of this, but now they want to start ramping up, but they're hesitant and they're conservative and you know, they might have a credit box that goes down to 660 or whatever, but are you seeing them saying sure, we'll lend at 660, we want to lend at 660 with a resilience of like one to five or one to ten. Maybe just take a step back and say, what feedback are you receiving, how are people using it, what are the lenders doing?

Sally: Yeah. So, the interest from lenders has been phenomenal. Even in a good economy, as we spoke about, we have to price for risk and now that we're in this situation that we're in now as lenders do pull back and contract, what the FICO Resilience Index can allow them to do is to keep credit flowing better than they otherwise would have, So, you know, if they're pulling back from say a 640 to say a 700, what the Resilience Index allows them to do is to say...well, maybe between the 640 and 700, I can still retain or continue to approve those most resilient in that band so they don't have to contract credit as much as they otherwise would have done so that's really the way the lenders are looking at it.

Whenever there's a new tool in the market, lenders....they test it, right, they're analysts, they're data scientists, they're not going to completely use it without testing it first, validating it, really understanding how, you know, what the patterns looks like and maybe starting to test in small percentages of the population just to see what happens so, that's the mode that lenders are in now. We have hundreds of lenders who are taking the scores both in archive reports as well as ongoing to monitor and, you know, it's a time where they can really look to see how it impacts from the early results that they're seeing through the recession.

Peter: Right. So, are you getting far more interest than you expected when you first put this out there because I can't imagine anyone not wanting to use this at this particular time unless you've really got a reason specifically that you just want to maintain super prime whatever, but even then, you could use it. So, are you seeing more interest than expected?



Sally: Absolutely, absolutely. And the Resilience Index is reallywe don't view it as a recession only product because you can actually manage your portfolio in a benign economy so that you can weather the next recession better. We've shown in our validations that even though that ranking with the FRI doesn't show up until you're in a recession, you can still predict it well before the recession. So, you can look at FRI scores, you know, years before, a few years before and then look at the performance once the economy turns down and see that it rank orders even though you would not have seen it before in a short period of time just because it was a benign economy.

So we don't view it as just a recession only product, but absolutely.....especially in our whole use case of ...well, maybe we don't have to contract as much as we do or maybe as things start to look better we can be a little bit more aggressive with the more resilient ones. They're looking at it both in terms of, you know, managing that contraction as well as starting to open up again.

Peter: Yeah, right, right, I get that, that makes sense. So then, one thing I'm curious about though is, you know, you've got the three credit reporting agencies that...you know, different lenders use different sub-sets of those, how does the FICO Resilience Score....are you onboard with all three agencies. The FICO score is.....you know, my FICO score is slightly different at Experian, as it is at TransUnion, as it is at Equifax, but can you explain just how it's interfacing with the agencies?

Sally: Sure. We will be at all three agencies in the near future. So, it's already available at Equifax, at Experian and will be available at all three. We do recommend that it falls alongside the FICO score so where you get your FICO score, you get your FRI score and that way scoring the same information, it's just looking at it from the two different perspectives.

Peter: Okay, okay, that makes sense. So then, there's been some talk in the industry over the last few years....I remember, we had a session at LendIt many years ago that refuted this, but I'd love to get your take on it. When you hear fintech lenders saying, we go beyond the FICO score, firstly, what are you think, how do you kind of react to that, what does that fintech lender not understand about the FICO score?

Sally: Sure, yeah. So, the FICO scores were never intended to be used as a sole determination of risk. You know, even 30 years ago, every lender would ask information, what we call application information, right, that the consumer would fill out in addition to pulling a credit report and the FICO score was designed to very conveniently be available on that credit report and did not replace those broader models, usually custom models, that look across the board. So, it was never intended to be, you know, solely looked at.

Having said that, I think what a lot of the fintechs are saying is, you know, there's technology available that gives lenders access to data that....you know, they don't necessarily have to ask for, it's not their proprietary data that they know about the customer, but they can get alternative data, maybe consumer permission data where consumers put in the credentials to their



LEND ACADEMY

checking and savings accounts and we could use that information as well and we're absolutely in agreement.

In fact in 2016, we launched the FICO Score XD which in partnership with Equifax and Lexus Nexus look at information off of Equifax NCTUE database which looks at how you manage your telco bills and utility bills as well as information from Lexus Nexus properly typed as information there.

So, that was aimed at that 53 million consumers that are not represented at the major credit bureaus in the US because they don't have a history of credit. So, we're in absolute agreement that in order to expand and give lenders the ability to give access to credit to more people that we need to look at more information so the XD scored that in 2016 and in 2018, we launched the UltraFICO score.

The UltraFICO Score is, you know....think of it more like a second chance score, right. Somebody applies for credit and their FICO score.....either they don't have one or perhaps they are, you know, a little bit low, they're below their threshold...the Ultra FICO score allows the lender to offer up the ability for that consumer to pull in their cash flow data from their checking and savings accounts and evaluates that in addition to what's in their credit report so, they have other ways of showing their financial responsibility. So, financial inclusion is really important, it's very important to us. We launched in 2016 the FICO Financial Inclusion initiative to really test out the various types of alternate data that can be used to make credit more accessible to more people.

Peter: Okay, that makes sense. So, before I let you go, a couple more questions I'm curious about. Like when you started in the space, data science wasn't really a thing, it wasn't a term and now.....

Sally: Right, it wasn't.

Peter: (laughs).....and now everyone....

Sally: I was called a Programmer Manager....Program Manager was my title. (laughs)

Peter: Now, you'd be a data scientist and people now like to tout how they use Artificial Intelligence and machine learning and they have a large team of data scientists that are building proprietary models that are the most advanced that have ever been created. But, I'd love to get your take on what you think about that whole thing, but then, seriously, about.....you know, FICO has been doing machine learning for decades, right, so tell us a little bit about how you do things internally and how you feel about the latest craze. (laughs)

Sally: (laughs) So, overall, it's great, right. I mean, you're talking to the pioneers, you know, we are the pioneers who believe that we can make much better business decisions if you use modeling and use predictive modeling, mathematical optimization and other aspects of what we



call decision science which is the discipline around improving your decisions over time for better business results and better results for the ecosystem and for consumers and everyone alike.

So, it's great that that's catching on, it's great that that's catching on not just in credit where it's caught on for decades, but in many other fields so we're quite happy about that. Some of the hype sometimes.....we think that's kind of funny because, you're right, Artificial Intelligence has been around for a while, machine learning has been around for a while and there are a lot of people that are just newly discovering it. If there are great new techniques, I think probably the bigger impacts have been just the increased computing power, right, as well as more digitized data, those things really transform. As you have more digitized data available to you, that's really what transforms the ability to use these models and help them make better decisions over time. So, it's been great to be at this perch watching all of this happen.

There's a little bit of....you know, Artificial Intelligence as kind of the method of the algorithm versus,,,you know, we use for something like FICO scores we use a method that is highly, highly explainable. We know Artificial Intelligence is getting more and more towards explainable, but it's not quite where our needs are. For something like a FICO score where consumers monitor their FICO scores as frequently as once a month, you know, often and we need to be able to explain why the score changed the way it did, we stick to the very highly explainable method, but there are other things we do at FICO like detecting fraud and so forth where we've been more like neural networks and other types of methods from the very beginning.

So, it's important to bring the right tool to the right circumstances, but all of that should be available and even with the FICO scores, we use plenty of machine learning and AI as part of our research, the way we kind of look through the data and try to identify patterns and test new concepts and see what works. We use it all of the time, but then the final model that is actually programmed at the credit bureaus is a very explainable model because that's what we need for this particular instance.

Peter: Okay. So then, last question. Without giving away any secrets, what are you working on today that is interesting and exciting?

Sally: So, you know, a lot of what we're doing is in the US, but we're also international and one thing that we can do internationally is, you know, sometimes we tested data sources, for example, internationally that would be harder to do in the US, it's more regulated and just more developed in terms of what lenders do.

So, for example, we're working with a telco company right now in Sub-Saharan Africa to offer micro loans through their payments system. This is a country where not only do you have people who are not represented at the credit bureau, they're completely unbanked and they just use cash, but more and more they use their cell phones to transact for mobile payment system. This partner actually has a platform where they invite lenders to offer micro loans through that payment system and now FICO score along with it so that lenders can gauge that risk, if that's the risk, and open up to that particular market.



LEND ACADEMY

So, that's very exciting because we're talking kind of micro loans and that's a blurry line between, you know, consumers who are actually getting a small loan for their livelihood, right. They purchase some fruit in the morning and they sell the fruit juice in the afternoon type of situation so that's very exciting. We found that telco data that can be accessed in multiple ways is very predictive of risk and so we look for those opportunities in many countries.

Peter: Right, interesting, really fascinating. Sally, I could talk to you for a lot longer, but we'll have to leave it there. I really appreciate your coming on the show today.

Sally: Thank you very much.

Peter: Okay, see you.

It's safe to say that consumer lending has gone through a very tumultuous period, certainly the most tumultuous period since 2008/2009 crisis and probably the most on-record for these lenders. What you hear from the chief risk officers, from the CEOs of these lending platforms is that they're all starting to ramp-up, some have ramped-up to pre-pandemic levels already, most are still not quite there yet and they all talk about a conservative approach to their underwriting as they ramp-up.

What the FICO Resilience Index does is it gives these lenders the confidence that the borrowers who are coming to their platform are going to be resilient even if we have a deeper recession, a longer recession than what anyone expects. These people will be able to pay back their loans as they are demonstrated to be resilient in difficult times. It's a credit to the industry, it's great timing that this has been made available this year.

Anyway on that note, I will sign off. I very much appreciate your listening and I'll catch you next time. Bye.

Today's episode was sponsored by LendIt Fintech USA, the world's largest fintech event dedicated to lending and digital banking is going virtual. It's happening online September 29th through October 1st. This year, with everything that's been going on, there'll be so much to talk about. It will likely be our most important show. So, join the fintech community online this year where you will meet the people who matter, learn from the experts and get business done. LendIt Fintech, lending and banking connected. Sign up today at lendit.com/usa

(closing music)