AEI PREMIUM

AEI Presents Nothing Borrowed, Nothing Gained: How Farm Financing Works, and When it Doesn’t or The Counter-cycle and the Future of Ag Lending

Episode 1: Forever in Your Debt

Brent Gloy: Debt in itself is a funny thing
David Widmar: Everyone's talking about rising interest rates, a slowing economy and higher inflation. And. Everyone's concerned about it. Everyone wants to talk about it. No one really knows where it's going.
Brent Gloy: for the last 20 years we've been in this. Low interest rate environment. And it's the frog and the pot you don't realize how much that's adding to asset prices, until all of a sudden you realize, oh, it's not going to be low forever.
David Widmar: Add just a fire hose of people commenting about that, uncertainty, it amplifies, and it creates this great angst, this great chaos in our decision-making process.

Sarah Mock: If you ever want to make an American farmer deeply uncomfortable, ask them about their debt. O.K, - that doesn't just apply to farmers. It applies to pretty much everyone.
Debt is a scary thing. It's a burden, an obligation, a risk. It can be a sort of deal with the devil, where we carefully plan and predict and necessarily promise, signing on the dotted line with the hope that nothing unpredictable will happen to make us a liar, but with the complete understanding that something *could* happen, even something completely beyond our control. The consequences of which can last much longer than we’d imagine.

David Widmar: This was in the early 2000s. I remember overhearing someone saying that their family had just finished paying off some debt that they had taken on during the 1980s farm financial crisis. And so, we're talking about, more than two decades later, they were still working through some of that restructure that, that family had gone through. And it just stuck with me that the person who was telling the story wasn't even alive, when this debt had been taken on. And so, their entire childhood was tied up with this story of this financial crisis and these challenges and the family’s struggling to pay through that debt.

Sarah Mock It's been two years since we published our first season of this podcast, about the 1980s farm crisis. At the time, commodity prices had been in the doldrums for years, and things were looking bleak-- so we set out to answer the question of whether it looked like we were headed for a repeat of the 1980s? As we were dropping episodes, the world was changing fast-- in many ways, we started to feel like we'd chosen some really bad timing in answering the question, "is everything getting worse?" When the situation was so clearly getting better. But then some strange stories started to emerge. And there were a lot of them. For me, it was the one, maybe you saw it, about a used trailer selling for more than it cost to buy it new. Suddenly it started to look like our deep dive into agriculture's last boom/bust cycle wasn't too late. It was too early. Late 2020 was looking less like 1981 all the time and a lot more like 1975.

But if you heard any single soundbite comparing 2020s to the 1980s, you've probably heard one reassuring message-- "There is way less leverage in the farm economy today than there was back then." Less leverage, less debt, more owned assets, and more fixed-rate debt. In other words, a better debt-to-asset ratio and a more durable one.

But there's a paradox here since the 1980s, ag has also become an increasingly capital-intensive business. In other words, farmers in 2022 need way more money to operate their business every year, than farmers did in the 80s and before.

So, what gives? How much debt is there, really, in the ag economy? Who holds it? Where did it come from? And what might today's situation mean for the farm sector as the U.S. economy barrels towards an uncertain future?

These are the questions we're going to tackle this season on *Nothing Borrowed, Nothing Gained: The story of ag lending; past, present, and future*. I'm Sarah Mock, and I'll be joined by my co-hosts David Widmar and Brent Gloy, across this coming season.

They're ag economists and co-founders at Ag Economic Insights. For years they've been diving deep into ag history and economics to understand past crises in the farm economy and develop tools to help detect and manage through future ones. In addition to their research and writing -- which you can find at aei.ag -- they've spent a lot of time recently talking to farmers and other key ag players, about what they see when they scan the horizon of the farm economy. And overwhelmingly, one answer surfaced.

Here's David:

David Widmar: Everyone's talking about this intersection of challenges - it's rising interest rates, a slowing economy and higher inflation, and everyone's concerned about it. Everyone wants to talk about it. No one really knows where it's going.
And there are conditions or ingredients that are really ripe for a chaotic weather event, right? So, you're on the Great Plains, you have warm moisture from the Gulf of Mexico and this dry air that comes across the Rocky Mountains. You could have thunderstorms or tornadoes, it's this breakout situation. And in our decision-making process, if we have uncertainty and we add just a fire hose of people commenting about that uncertainty, it amplifies, and it creates this great angst, this great chaos in our decision-making process. And that's where we are.
We have uncertainty around the economy. We have uncertainty around inflation, and we have uncertainty around interest rates, and everybody is talking about it - it's almost 24/7. And that's just leading a lot of folks to question what they should be doing. People are asking me, should I buy this house or this piece of property today? Should I lock in my interest rates? Are the Feds going to raise rates again? And so, we said "O.K. can we help folks understand a little bit of what is going on in the farm economy and in farm finances and farm debt so that we're not just scared about this unknown uncertainty?

Sarah Mock: At the core of so many of these questions lies the action of just one organization – the Federal Reserve. Here's Brent:

Brent Gloy: Today, all every anybody is talking about is the Federal Reserve increasing the very short-term interest rates. And it makes sense that everybody's talking about it because it, it is important, and everybody can see a connection between what the Fed does and the economy. The problem is that it doesn't happen quickly.
And so, I was telling David, before I was looking through a macro textbook and I saw this, great quote from John Bates Clark going back to 1898. He says, "The modern world regards business cycles, much as the ancient Egyptians regarded the overflowing of the Nile, the phenomenon recurs at intervals, it is of great importance to everyone and the natural causes of it are not in sight."
And I think that's relevant today as well. We know business cycles occur; we know recessions happen, and we do know, I think, that how the Fed behaves is one of those causes that can impact it. But what we don't understand is, just where is the Fed building the dam in that river of credit? And how long is it going to take for that to stop things up and cause that recession?

Sarah Mock: I like this quote – It's a good mission statement for our season. Where our mission will be to better understand and prepare for the coming ag business cycle, by understanding one of the most important systems that drive them, ag credit.

Here's the roadmap: First, we'll spend a little time in the past understanding how the ag credit world came to be the way it is, from the history of farmer activism around the gold standard to the creation of more than one government-backed ag lender. In doing so, we'll understand how those past forces continue to shape ag lending today.

Then we'll do what David just mapped out. We'll walk in the proverbial footsteps of a loan as it passes from a local banker, farm credit, or vendor's desk up into the financial system all the way to the very top - to the Federal Reserve.

As we follow along, we'll take careful stock of the risks that exist at every level of the ag lending ecosystem, and we'll learn how thoughtful farm managers, and folks who sit across the table from them, should be thinking about those risks as they make key decisions going forward.

Finally, we'll take a closer look at what Brent just referred to. We'll dig into some of the most recent business cycle extremes – the 1980s, 2008, and today - and we'll zoom in on which levers are being pulled, by whom, and what the consequences are for farm business in the short term and the long term.

There will be lots of discuss along the way about what the future might look like, informed by bank closures, bailouts, and too big to fail, Debt-to-asset debates, shadow lending, and financial innovation, and even the modern ag land bonanza on Wall Street. And all of this, we hope, will help shed some light on the question, what the heck happens next?

But maybe most importantly, we hope by the end of this season, to help answer the questions that Brent and David have been getting about whether this is the right time to take on debt, refinance or grow? Now more than ever, answering questions about when, how, and how much debt is right for your farmer business, trusted advisee, or borrower requires more than back of the envelope math or a simple approval from a lender or vendor. If you want to understand the real risks of credit today in the farm economy - and how to manage those risks into the future. All we have to do is understand how the entire ag credit system works, and why.

No small task, I know, But the reality is in fact, to understand today's farm lending environment, we'll have to go even broader. Because so much of the ag sector's

recent experience with credit had nothing to do with agriculture and everything to do with the wider world of debt.

Brent Gloy: The last 20 to 30 years have seen nothing, but generally declining interest rates. And so, the cost of credit has done nothing but fall for years, decades, a little bit of ups and downs in there, but the long-term trend is really clear and it's toward lower costs of credit, which, when something is cheaper, you generally demand more of it and if that long-term trend were to change or be broken, it will have, a lot of impacts in the real economy.
There are people talking now about significantly higher interest rates and there's always people prognosticating something higher or lower, but I think right now it sure appears that there's a bigger potential for that than there has been for a long time. And, if that were to change, it can have big impacts across the agricultural sector, which is heavily dependent upon credit.

Sarah Mock: That fact of modern agriculture's capital intensity, which also makes it even more dependent on credit, is a theme we'll come back to a lot.
In fact, something that jumped out at us, as we reflected on both of our previous seasons, was how much both the story of the 1980s and the story of ethanol – and carbon markets - were or are likely to be caught up in the farm credit story.

David Widmar: Even in *Corn Saves America*, when you're talking with the mania that was going on with building ethanol plants, financing those ethanol plants was a huge part of that boom. And then when the creditors disappear, there was a housing crisis and all the financial struggle that happened there.
Credit got hard to get, it got expensive and there weren't as many people out there doing it. And so, getting credit is something that oftentimes the credit markets are open - it's fairly easy to get money. there's a lot of options. But that isn't always the case. And there are times in history when, like the Farm Financial Crisis, the 1980s, or the housing crisis, that it becomes difficult to get financing.

Brent Gloy: One thing with credit is that it exacerbates the cycles that are natural. When times are good, you want to have more capital, so you borrow it and you put it to use, and it earns a high rate of return. You make a lot of money and then when times aren't so good and you can't earn enough to pay it back, then you've got to come up with the funds somewhere else. So, it tends to be very contractionary – as that credit is withdrawn and very expansionary when it's added. And it tends to follow the good times

the bad times. And so, it makes those cycles, bigger than they would be otherwise. So, it's a wonderful tool. But it can also, lead to these, big swings in markets.
And, right now, like I said, for the last 20 years we've been in this low interest rate environment. And it's been declining for a long time and it's the frog in the pot or whatever - you don't realize how much that's adding to asset prices, and everything else in the marketplace, until it changes. Until all of a sudden, you realize, "Oh, it's not going to be low forever." And if it's not, what does that make the situation look like? And it's hard to notice it while you're in the middle of it. These things take long.

Sarah Mock: Long is putting it lightly.
The 1980s are a good example -- a crisis at least 10 years in the making, that took that long and probably longer to unwind as well. And for individual families it took much longer. This reality, maybe even more than the scale and importance of debt, make the subject complicated emotionally.

Brent Gloy: I think credit in general always gives people heartburn, in part because, everybody has a personal connection somewhere, to someone who has, used too much credit. So, it causes lots of people nervousness.
And then in agriculture, it's a capital-intensive business. We've substituted huge amounts of capital for labor. We made that substitution taking it to an extreme, so we use lots of capital and, a lot of that is, equity or non-debt capital, but then there's also a lot of debt capital, in the sector as well. So that, is something that's, I think, always lurking in people's minds. And it's credit even more broadly. If you go to a farmer meeting and you start your question-and-answer session, and you get into this kind of macro vein of a discussion, like, "What's happening in the economy broadly?" I would say three times out of four, you'll get a question about the federal budget deficit and the debt more often the debt level that the United States has. So, something that I think people worry about, just in general, is too much use of credit, whether it be by the government or individuals or whatever it may be.

Sarah Mock: All of those stories and memories we find tend to accumulate and calcify, leading, in many cases, David and Brent have found, to a deep-seated aversion, especially among farm families, to debt.

Brent Gloy: I think from an early age, we are cautioned be careful of debt, so much so that I used to - like when I would teach my finance class, I would talk at the end and I'd often tell people, students, debt is always the things that like, some people are almost

afraid of it, don't ever use it. And I would always tell the students, “No, it's a tool, right. It's a good tool. It can be very helpful. But just use it with caution. It's like playing with a, I don’t know, I can't think of a better analogy than a gun - very useful, but also very dangerous if used incorrectly.” I think debt we're cautioned against this maybe come back to almost like a biblical kind of sense. Being neither a debtor, what is it, how does that verse go? Neither a debtor nor a borrower be?
David Widmar: It’s not the Bible it's Shakespeare.

Brent Gloy: Is it really? David, isn't there some biblical connection to debt? Certainly, there's several and all this other kind of stuff, but.
David Widmar: There's all sorts of debt references in the Bible.
Brent Gloy: Sure. It was a straight from the mind of God to William’s lips, I guess.
David Widmar: Neither a borrower nor a lender be for a loan oft loses both itself and friend.
Brent Gloy: There you go.
David Widmar: But I think it’s interesting just how this is woven into like very cornerstones of, there's a line in Hamlet - the background is that the character was, counseling his son before visit to Paris and telling him, you shouldn't be - think carefully about your friends and your money and because these are dangerous things to sometimes combine.
Brent Gloy: Yeah.
David Widmar: This stuff goes back a long time and like it's deeply rooted in the human experience.

Sarah Mock: I think the ideas that Brent and David are exploring here make a valuable starting point for our explorations. Because when we think about the big picture of credit, it's worth asking, given the stakes, the fear, all the warnings why do we still do it? Why do any of us agree to be in another's debt?
A few very obvious and practical answers come to mind. There are things we want to buy, for example, houses, cars, things that if we had to buy them in cash, we might never be able to purchase. Some things are very expensive, and we need them now, and the key is, we expect them to continue to be valuable, or create value, while we have them, and thus we're confident that in the end, we can have the thing we want, and pay the price to borrow the money, and still come out better than we would have been otherwise.
Using the simple example of a house – the calculation is that the value the house will lend you will be greater the cost of the interest you will have pay to the bank.

Maybe that's in financial terms – you might believe the house will literally allow you to make more money by giving you a place to rest up in between days at work. Or it could be less tangible rewards, say in happiness and stability.
A third way a house, or any other asset, might turn out to be worth the cost of the interest, is arguably the most risky, and the least certain. The value of the house might appreciate -- so that when you want to sell it, you can sell it for more than the cost of the loan and pocket the difference. This is a kind of speculation, taking on debt to acquire assets speculating that the value of the assets will go up.
Though we might not want to believe it, speculation plays a role in a lot of decision-making around debt. And don't get me wrong – there are people who do well for themselves, using borrowed money to buy things that they later sell for big bucks. But it seems that for every success story, there're many more failures, and there are many stories where the successes themselves lead to the failures by setting off bubbles. Bubbles grow in markets where everyone is so eager to write their own success story, that they bid up prices well beyond the actual value of the assets in question. The bubble story ends the same way with a burst, falling prices, and usually, a lot of people left with boatloads of debt for assets that are worth a fraction of what's remaining on their loans.
There are certain circumstances that make bubbles more likely, and cheap credit - like the kind we've had for the past 20 years - is right at the top of the list.
See, cheap and abundant credit makes it even easier to bid up prices, and for just about everyone to get in on the action -- be it to buy houses or farmland, new equipment or, and this is a real thing, tulip bulbs. And staying out of a bubble's path of destruction takes some serious will power, because there are few other situations that provoke such an intense fear of missing out as a market boom.

Brent Gloy: The two hardest kind of emotions that we all deal with when it comes to finances are euphoria and desperation. And they're both equally problematic. Euphoria, when things are good, you can only see that things are going get better. And then you may know that they're not, don't think this is sustainable, but then you see people doing things. You go, "If they can do it, why can't I do it?"
And it leads to this kind of mass psychology of it is very strong. Even if you understand it. I understand it, I study it, I know what it is, but you're susceptible to it and you find yourself, sitting there at an auction or something going, "I can afford that even if, even if things go badly, it'll be right. I can do it." And it might go well, and "Oh my gosh, what am I going to miss out on?"

And we don't think about what we might miss out on when the opposite of euphoria happens, which is the desperation, which is when people are despondent almost the point of, “Like I can't, I just want out, I’ve got to do something different. I can't handle this anymore.” And, I always say you just think about how often you look at your investment accounts when the market's going up versus how often you look at them when they're going down. And that'll tell you a lot about your personal kind of psychology of all this. And if you're like me, I'm much more likely to be looking at that stuff when it's going up than when it's going down, you just put it off.
And as things are going up, we all want to get into it. And then what makes the euphoria the most dangerous is when it comes at a time of really cheap money. So, if you have really low interest rates and a lot of financial euphoria, there is a huge temptation to just go borrow a lot of money and play in the game because it's cheap. And that can end very badly. Not always, but sometimes badly.

Sarah Mock: Cue the ominous music, right? Because that's the thing -- we know that interest rates have been low, and borrowing money has been cheap, and that farmland prices, farm equipment prices, everything is rising, but people are still buying them. I think it’s pretty clear, the euphoria is here -- how long can it last before the desperation?
At the same time, I'm sure there's plenty of people listening who are feeling pretty good about themselves, right now, who maybe are evening wondering why they're still listening, because they don't use credit. They don't borrow money. What does all of this have to do with them?

Brent Gloy A lot of people are like, I don't borrow money. It's not important, it doesn't matter, but you're impacted by it. If you own your house and you're not paying on the mortgage, does it matter if interest rates change or not? If you care about the value of her house, yeah, it probably does. You're never going to sell your house. Does it matter or not? I don't know. Guess not if you're not ever going to sell it or monetize it in any way, but for a lot of people the answer is it does matter and the value matters. And I think that's one of the misleading things that people think, “I don't have any credit, so it doesn't impact me,” but it does.

David Widmar: I'll go out as far as to say, I think that a cheap interest rate makes thousand dollars cell phones really easy for Verizon or for Apple to put on a payment plan. If the cost of capital were higher, selling these would be different proposition. It'd be a lot different business model. And so, I think it impacts us well beyond the cost of borrowing money.

Sarah Mock: This - the way that credit affects all aspects of our economic lives is critical to keep in mind. Obviously for farmers and ranchers who depend on credit to run their businesses, credit is important. But ag credit is important for a lot of other reasons as well.
It affects prices of everything in the agricultural sphere, from land to inputs to labor, and in doing so affects people and communities well beyond the farm gate, and often affects farms, and the decisions farmers make, well beyond the balance sheet. In that way, credit is a subtle but powerful tool -- one that intensifies successes, but also failures.
I want to take a beat here to acknowledge that, this stuff is complicated. There are a lot of players in ag lending, and we'll talk about pretty much all of them this season. All these players are taking a lot of complicated actions, over time, an extraordinary long period of time, actually.
In fact, the story of ag lending in 2022 started at least 150 years ago, and arguably even further back. All to say, we're going to work hard, over the next several weeks, to demystify the ag lending system-- and reveal those insights that could be most helpful in informing decision-making in uncertain times. So, if you're anything like Brent -- and at this you're point thinking:

Brent Gloy: Sarah, I don't know how we're going to get to the interesting parts of this. I haven't figured it out yet. How we're going, but I have faith.

Sarah Mock: Stick around because there's a wild ride ahead. But that's after the break.

COMMERCIAL BREAK

Sarah Mock: So full disclosure - and I warn you, you might find this shocking, I, in fact, was not farming (or alive) during the 1980s farm financial crisis, or any part of the runup to it. I'll hazard a guess that a number of you out there listening also were not of a, let's say credit-worthy age, during one of the biggest inflation/debt crises of the 20th century.
I'll tell you when I was alive, however, was during 2008. And in a lot of ways, we are still, today, living in the long shadow of the Great Recession and the housing

crisis – of the loans that, to many, felt like good investments at the time, and how those loans compounded and compounded until the whole economy was on its knees.
I've been thinking about 2008 a lot recently, given that I, a millennial who would have never thought such a thing possible, recently bought a house.
I've been thinking about what inspired the confidence to make such a move, when so much of my own economic life experience has been that housing booms, which we are arguably in right now, are something to be very, very afraid of. I think it's the same thing that gives farmers and ranchers who experienced the 1980s confidence, a general sense that history will not repeat itself. In other words, between regulation, the rooting out of bad actors, new safeguards, and all of us just generally being a bit wiser, the whole lending sector has improved for the better. Right?
It never hurts to check, I think, just to make sure – that things really have changed. So, I sat down with a researcher who's had his eyes on ag lending since well before 1980.

Mike Boehlje: Yes. So, it's Mike Boehlje and I'm actually an emeritus professor at Purdue University.

Sarah Mock: I had a simple question for Mike -- has ag lending changed since the 1980s? In particular, in a way that makes you confident that history won't repeat itself? And his answer was yes. But with a truly enormous asterisk.

Mike Boehlje: We see more professionalization in the lenders to production agriculture than we've had in the past. They seem to be more eager to learn how to do this, understanding some of the more fundamental concepts of finance and lending policy and practice. But at the same time, they continue to work with some really soft data, really information that's not very accurate.

Sarah Mock: Well, I don't like the sound of that.
The rule about information is, "garbage in, garbage out," right? If bad data is being used by lenders to determine whether a potential borrower is creditworthy. Then in this case when no so good information is being used bad loans seem like an obvious result. Since the granting of loans that people could not afford was an essential ingredient in 2008, this seems - not good.

But what let's not jump to conclusions. I asked Mike what he means exactly by "bad information." Here's the nutshell:

Mike Boehlje: For example, standard income statements, and standard accounting practices in terms of developing income statements. We still see a lot of credit files that a lot of lenders have that use as a proxy for that standard income statement a Scheduled F tax return. A Schedule F tax return is crap for understanding a true estimate of income.

Sarah Mock: Mike points to a University of Illinois study that proves just how bad these returns can be - in some cases, Schedule Fs misstate a farmer's real income by as much as 50%. These are the numbers that lenders are, in many cases, still using to determine, essentially, whether borrowers have a proven track record of income that indicates that they will be able to repay a given loan. And Mike says it's not that lenders aren't aware that these Schedule Fs are bad news -- there is simply an assumption within the lending community that though in any given year these documents may be inaccurate, over time, they average out.

Mike Boehlje: If you look at what happens with the 3-year or 5-year average, you do find that it does average out, but it's still typically 30+% wrong. And when I say wrong, it's wrong in a very conscious direction. Farmers use Schedule F tax return principles as a way of trying to delay or reduce the payment of taxes. So, what they do is they will probably typically prepay expenses, delay sales, and try to move tax burdens into the future. And so, that tax return may provide a very inaccurate statement of what the income is And maybe that isn't too much of a problem when you've got good incomes, but when you not got good incomes, what farmers have to do is they have to reverse that process to get the cash, to be able to get the money to farm the next year, without having to borrow more than they would like. And so, what happens is that they end up having to pay today for things to meet their cash flow and the tax return then results in a profound overstatement of the amount of income that they actually receive, or they have a significant loss, and they still owe taxes. So, we have a very inaccurate statement of income

Sarah Mock: To put a fine point on Mike's comments here: The use of Schedule F tax returns basically means that when conditions are good, income will be understated, which, when it comes to credit, doesn't have much impact, because

in good times, there's usually less need for credit. When it becomes a problem is when conditions, in the economy or on the farm, are not so good.
In these times, Schedule Fs will reliably overstate income. In short, when farms are most risky to lend to, Schedule Fs make them look exactly the opposite. Even when lending to bigger farms, where lenders usually require more rigorous accounting, Mike found that income estimates are often not completely accurate. So, to me this looks like a red flag - lenders using bad data about income, even after the 1980s crisis, seems like problem that should have been solved. But ag, compared to most other industries, has something of an ace in the hole, right? Ag is a capital-intensive space, and American farmers and ranchers also hold a lot of equity -- namely, many own land and equipment that bring big positive numbers to their balance sheets, when imperfect data might leave room for doubt, owned assets offer real reassurance - right?

Mike Boehlje: The standard operating procedure in agriculture is to use some form of market valuation of assets, accounting principles say, no, you value assets generally at the cost basis - what you pay for those assets, right.
In agriculture, and particularly during the 1970s, we did a lot of writing up of asset values following the market. That then allowed banks to be within their underwriting standards by providing farmers more money. And that then allowed farmers to pay higher prices for farmland. And so, what we ended up with is a balance sheet that looked good, but it was a balance sheet based on market values rather than cost basis. And a lot of the net worth that was being accumulated in agriculture was not generated from retained earnings, making money and saving money, it was based on the fact that we were taking our pen and our pencil and marking up the value of assets.

Sarah Mock: Alright everybody, if you haven't booted up your calculator and put on your casino visor, the time has come. Accounting might not be the sexiest part of farming, or let's face it, any sector, but this little cheat - where ag accounting uses the market value of an asset rather than the cost value - is worthy of your attention.
In some ways, it makes sense. Farmers often hold assets, land in particular, for decades, and values change dramatically over time – a fact which most farmers would like to take advantage of. But, at the same time, allowing these farmland values to be written up can be a dangerous game. Not only because a farm business might have a ton of value in assets on paper, that might not actually materialize if and when needed - but because of a larger scale risk for banks who

believe, based on the combination of suspect income figures and a possibly inflated balance sheet, that they're making a safe and conservative loan.

Mike Boehlje: So, what happens is we have an industry that when it was doing that, it had a false sense of the security position. So, we had inaccurate measurements of the income we were generating, and we had an inaccurate statement of the security position - how much we actually had in terms of our security as a lender. We had a mortgage, we were well secured in that regard legally, but we didn't realize that we were leveraging farmers at a much higher level than we really should be. And so, we have those two documents that really compound each other's problems in terms of measuring the difficulty in the industry.

Sarah Mock: Two documents – two red flags. For Mike, these were the two ticking time bombs that brought ag lending in the 1980s to its knees. My hope was that after decades of improved technology and better reporting, that ag lending has moved away from its use of Schedule F tax returns and market valuations of assets. Right?

Mike Boehlje: We have made some changes, but still, the principle of market valuation in agriculture is still the standard operating procedure. In almost all other industries you use cost basis for valuation of assets from a lending perspective and that's not the way we do it in agriculture.

Sarah Mock: So, the answer then to the question of whether enough has changed in ag lending to avoid another ag debt crisis seems to be, at best, maybe?

Mike Boehlje: There was a survey done here at Purdue. About what's happening right now in the land market - 30% increase in land values this last year - in Indiana 30%. And so, bubble is now being talked about, are we in a bubble in land values? I think it's a legitimate question. And one of the respondents - they're asked about what they think is happening and what's going on in the market - and one of them who has been in lending for quite a while, mentioned that we thought in the 1980s, that we were making loans to farmers for farmland with loan-to-value ratios that were very acceptable. Not loaning more than 60% or whatever of the value. There's had been a standard then of what you should do some went a little higher than that during that period of time, but they were making a loan to value calculation based on market value of the assets rather than cost basis of the assets. And what it said is that we found out - after four or five years - that we were actually at a 95% loan-to-value. Because even if some of the mortgage had been serviced and paid down, land values collapsed so fast and so much that our customers were much more highly leveraged than we realized. And his statement was, “I worry about whether we might be in that situation, again.”

Sarah Mock: There it is. If we've been soothed by the idea that debt to asset ratios in ag are low today, and that means the ag sector is in a good position, Mike's got a bucket of cold water for us because that's the thing about ratios, it's a relationship between two numbers, where changes in either debt or asset values could upend the proverbial apple cart.

Debt ratios can be targeted by lenders – but lenders only have meaningful control over the debt side. As Mike points out, a 60% debt ratio on a loan seems fine, unless the asset value suddenly falls by 20% - and that factor, a potential rise or fall in asset values, is something lenders don’t have control over, and worse they haven’t been that good at seeing changes in asset values either.

Part of the problem is, we've been living under the assumption for years now, that asset values in agriculture -- farmland in particular – just don't go down. On this point, I think a lot of people will rightfully point to the majority of the last 40 years and say -- "Farmland prices don't go down." Which, fair enough.

But on that front, I want to share one thing, a brief passage from an essay we'll talk about more than once this season called "A short history of economic euphoria." In it, John Kenneth Galbraith describes the two kind of people who get caught up in bubbles.

The first he describes as "those who are persuaded that some new price-enhancing circumstance is in control, and they expect the market to stay up and go up, perhaps indefinitely. The market is adjusting to a new situation, a new world of greatly, even infinitely increasing returns and resulting values." Sound familiar? A little bit like today, I would argue.

Just hearing that passage may be enough to move some of you into Galbraith’s second category, those who "perceive or believe themselves to perceive the speculative mood of the moment. They are in to ride the upward wave; their particular genius, they are convinced, will allow them to get out before the speculation runs its course."

In other words, in the boom before a financial bust, there’s two main groups - the kind who don’t believe it’s a boom at all, and the kind who know it’s a boom, but just think they’re smart enough to get out in time. Are these two groups operating in farmland markets today? Almost certainly. Does that mean it’s definitely a

bubble? No, it doesn't. But it does mean there is a real risk there, one that too few people are taking seriously.
Maybe an obvious follow up is, which group is it better to be a part of? Galbraith notes that whether you're a true believer or a skeptic, economic disaster actually tends to hit both of these groups in similar ways. In fact, if farmland is a bubble, the best place to be might well be on the sidelines.

But back to Mike, I'll admit when it comes to today's lending market, he is not all doubt and doom:

Mike Boehlje: The good news - just to say something – is e most lenders have not leveraged these higher prices that we have right now, the same way they did in the 1970s. What they've done is they've written their underwriting standards to try to protect themselves against the errors in that data. Okay, they know it's not very good and so that's why they're more cautious in terms of how much they're going to be willing to lend to them than they would a farmer or any customer who comes in with a set of GAP (general accepted accounting principle) documentation, and a history for the last 5 years or 10 years, and understands his numbers and can talk about what they mean and isn't just doing this because he has to, but is doing this because he really wants to be the CFO of his own business. So, historically, they modified it more than they might right now because they're still trying to protect themselves by being more cautious to not make loans or not loan as much as they would otherwise if there was more accurate data available.
And so, it's not that they are saying, "I don't care. You give me better data and I might be willing and able and well positioned to be able to make a bigger loan for the same activity." They'll loan you more money on that farmland, that purchase that you made. But if you can't provide the documentation, it's not that I say "no" - some of 'them just say, "no documentation that's accurate, no." But the community has generally been willing to say, "yeah." Particularly community-based organizations [say] "I still want to keep you as a customer. I just can't do as much in terms of loan as I would, if you had better documentation."

Sarah Mock: Well, that's something. It seems that history might not be repeating itself, but also that we're not exactly out of the woods. There are actually two major risks that Mike is identifying here.
Firstly, yes, lenders are likely still taking some considerable risks in terms of data. In part because of how low interest rates have been. But on the flip side –

the fact that they're raising their underwriting standards to compensate for the poor data, means that as bank consolidation continues – as it almost certainly will - and community lenders become fewer and farther between, Mike's last scenario, where lenders are willing to lend some based on history, reputation, and other social factors, that's likely to be a dying phenomenon.

Mike Boehlje: As that consolidation occurs, then you do end up with the possibility of those banks who have traditionally been community focused and had this local activity and willingness to make loans - even though the local person may still be there - when Chicago or New York says, "These are the rules" and we aren't willing to give exceptions on the rules, the underwriting standards are these. And you're going to have to - that's the basis upon which we're now going to be originating loans." That may resolve in a set of customers that they just can't serve.

Sarah Mock: Though bank consolidation and underwriting standards have largely emerged in the last 20 years, they've created a void in the market that has opened up opportunities for others who are willing and able to offer credit, especially in ag. And, in a lot of ways, this has helped reshape the whole ag lending system.

Mike Boehlje: So, the ag lending community - it used to be that the primary institutional lenders, the farm credit system, the commercial banking sector they were the main sources of agricultural credit combined with merchants and dealers who would provide operating loans for the purchase of fertilizer, seed chemicals, et cetera, and not be expected to be paid for those until the farmer sold his crop or sold his livestock et cetera.
So, the structure for providing, and the organizations providing the credit to agriculture have changed dramatically in terms of others, besides those two basic sources. So, we've seen a lot of change in terms of who are the players - it's not as simple as it once was to describe the structure that was out there funding farmers.

Sarah Mock: Mike is right – the structure of the ag lending world has gotten a lot more complicated in recent years. Since 2008 definitely, but also between 2008 and the 1980s. And, in fact, 1980 wasn't the beginning – ag lending has a storied past, and that history is still echoing through the system.

John Blanchfield: Now the question I think for policymakers today and for bankers, and it should also be for farmers and ranchers is, has all of the stuff that we put in place during the 1910s, the 1920s, the 1930s, the 1980s has all of that stuff helped? Will it mitigate an interest rate shock to this economy in the future?

Sarah Mock: What is all of this past stuff that might help us now? That's next time, on *Nothing Borrowed, Nothing Gained*.

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This show was edited, produced, and cohosted by me, Sarah Mock, along with David Widmar and Brent Gloy.
Special thanks to Mike Boehlje for sitting down with us as well, and further gratitude to this show's managers Emily Raineri and Sarah Hubbart, and the rest of the AEI team, including Jeff, Michael, Mason, and Aerin.