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Hey everyone and welcome to FYI, the four-year innovation podcast. I'm Michael Kroemer, a product marketing manager here at Arc. On this week's episode of FYI, we wanted to highlight last week's special edition of In the Know, a monthly video series with our CEO and CIO, Kathy Wood. On this special edition of In the Know, Kathy was joined by her mentor, former professor, and advisor to Arc Invest, Dr. Art Laffer. Famous for the Laffer curve, art is an economist and was named one of time's greatest minds of the 20th century. Together, Kathy and Art dive into the recent banking crisis and the world of crypto assets. We hope you find this episode useful, especially in a period of heightened volatility. Enjoy. Greetings everyone. This is a special In the Know that I do every month on Employment Friday, but there's so much going on right now and I wanted to bring into the discussion my dear friend and mentor. I've known art since 1976 and art introduced me to this industry. I'll be forever grateful for that. But I always go to art when we're in the middle of some kind of crisis, especially if it involves monetary policy, fiscal policy, and so forth. We are in a banking crisis. I was listening to Jane Fraser or reading what she said recently, which is this problem that we're having right now is very isolated, just a few banks. There aren't going to be many ramifications. It's all under control. The Fed's on it. The FDIC is on it. As you know, I've been guite concerned about Fed policy generally, and now the banking system. I haven't really discussed this before now, this particular crisis with art. I wanted everyone to be in on this discussion because art is, you know, he's very grounded theoretically from a monetary policy point of view, fiscal policy for sure. His mentor or one of his mentors was Robert Mundell, I believe, who won the Nobel Prize for his monetary economics. This is a very important time and I wanted to share it with all of you. Art, let me just tee this up. First of all, thank you. Thank you. My pleasure. You're my heroine, by the way, just for the record. Thank you. Well, I trust your judgment call here in terms of what's going on, or number of judgment calls. If we could just step back, I don't want to bias with too much of a statement. I'd just like to get your sense of what is going on right now, and I'd like to ask you questions about some of my concerns. Yeah, well, just in the background very quickly, we've had very bad fiscal policy since COVID-19. Huge increases in spending, huge increases in debt. The fiscal policies are going in the wrong direction. President Biden's latest budget is \$6.9 trillion. He wants to raise taxes on the most productive members of society,

the high-income people there, which is very disturbing to me if you want to have output employment production. The U.S. has been on a long slide down since the mid-1980s, Kathy.

The expected real return on capital has been declining almost throughout that whole period, and of course, the expected real return on capital is what we call the real interest rate, and the tips yield now, you can think of it in that. But that has been declining almost continuously through that period, which is a very bad sign for the economy. We're not the only country going through this, but then we have the monetary side where we've decided that we want to have monetary

policy run by people who look like other people rather than who are the brains of great monetary people like Paul Volcker or Alan Greenspan or Mick Chesney Martin. So we have a Fed that is modestly inexperienced and really doesn't understand these types of crises. So they have been over the

period of time, recent period of time, expanding the monetary base dramatically. I think the Fed's balance sheet today is about \$8.5 trillion, which is huge. And we sit there with bad monetary and bad fiscal policy, and we've set up a sort of a boiler experiment on the U.S. economy, and that boiler experiment, you know, has to break somewhere. There's some little tiny catalysts that

just sets the thing off. And the first really one in recent times is Silicon Valley Bank. Then you had Signature, you have Credit Suisse, you have Republic, you have Zions, you have a bunch of others. And now I believe they've even gone into the cryptocurrencies trying to pull them down as well. And you have a real serious problem in the banking system where the intrinsic problems of fiscal policy and monetary policy have not been done. And you have these short-term attempts to control the problem, and they have not been working. And I personally believe that we have a lot more problems going ahead of us until we do fundamentally solve the problem of monitoring fiscal policy and economic growth. So that's where I'd be. It requires regulatory policy, it requires monetary-based discipline, it requires really going back to trying to get a stable-valued currency rather than trying to control quantities. And my view has always been, and this is somewhere

where you and I may disagree, my view has been the Fed should always follow interest rates, never lead them. And what happens if you lead interest rates, you try to do it, what you find yourself doing is not doing anything for a long time, and then a big jump. And that is not the right way to handle monetary policy. It should be a gradual move because of markets, not because of Fed whims. So thank you for that setup, Art. So let's take what's happened in the last year. I began getting concerned about how rapidly the Fed was raising interest rates because I saw credit default swaps, so insurance policies against bankruptcy. I saw credit default swaps moving up four banks broadly last spring. And this is as they started, as I think the markets began to understand, this Fed was going to start raising rates at a very rapid clip. And then the yield curve inverted in July of last year. And that was another signal that not all was right out there. The bond market was signaling something. And I know you didn't agree that I should have written an open letter to the Fed in October. But the reason I did that is I feel as though there's no debate taking place. Maybe there is, and they all decide unanimously. Right. And all I was saying is, look, credit default swaps are going up. This is insurance policies against bankruptcies in the banking system. You've got an inverted yield curve. You've got commodity prices coming down. You have the gold price actually peaked in August of 2020.

And it is in a range. And then, of course, it broke that range. So I was just raising the question about how can you be unanimous when there actually is some conflicting data out there that you should be sharing your analysis with us? Like, how are you responding to this? And so that was more the spirit of the letter. And then I basically said, okay, we've set our peace. And now around this banking crisis, I think all of those variables, the credit default swaps, inverted yield curve, were pointing to two mistakes, two mistaken assumptions in the banking system. So I'd love to get your reaction to this. One was that during COVID, when we were worried about a depression, that a lot of banks that were being flooded with stimulus payments were taking that money and investing in safe securities, their government-backed mortgage securities, treasuries and everything, but they invested long term, put in the health maturity category. And in the case of Silicon Bank, they were earning really 1.6% on that book. So what was the assumption they made? They made the assumption that, gosh, we're probably going to

be fighting a depression here. And surely interest rates are not going up anytime soon. So that was the first mistake. And then the second, and it was a pretty good assumption because we've never had a 19, now it's a 20-fold increase in interest rates in less than a year. If you go back to Volcker, it was a two-fold increase, 10% to 20% that shocked the system. And what I like to say is the system is being shocked because more so than in the early 80s because we had two weeks ago an

inversion in the yield curve of more than 100 basis points. So more than 100 basis points on 4% is a lot different than more than 100 basis points on a 15% interest rate. So I've likened it to the Richter scale. So back then, if you look at 4% over 15, that's 6.5 on a Richter scale in terms of earthquake. If you look at 1% on 4% or 100 basis points on 4%, that's a 25 on the Richter scale, which is four times. I'd like to get back to that in a minute, but before we get to the yield curve, I just wanted to discussion of the yield curve. The second big mistake that Silicon Valley and these other banks made is that deposits would not go down. We haven't had declining deposits in the banking system. The latest I've heard is 48. If you look at M2, we haven't had a negative M2 on a year-over-year basis since the 1930s. So part of that, 85% of that is deposits are leaving and going to money market funds or in the case of these watching Silicon Valley banks customers waiting outside the bank. These are high-tech investors and they're waiting in lines to go get their money physically. What does that tell you? Maybe they put some of it under the mattress when they came out. So deposits are leaving the system, interest rates up 20-fold in one year. This is a major, major shock. It doesn't seem to me that the Fed is acknowledging that the banking system is under duress here. Let me do hit on a couple points you made. Number one, the reason I didn't like the open letter was not because of what you said. I don't want you to ever become the issue. I'm very protective of my Kathy Wood and I don't like you to be in the middle of a debate and be slurs and slams and all that. I'd like everyone to know you're probably the best analyst, the best research person I've ever seen and your competence is just phenomenal in selecting companies that will be great into the future. That was my protective instinct. Thank you. When you look at Silicon Valley Bank, let me try to describe it to you in a different way. Silicon Valley Bank had been in the zero interest rate world for a long, long, long, long, long time. They were struggling to get yield. What they did was they went out further and further on the maturity of government bonds to get any yield whatsoever. So they were

owning longer and longer maturity instruments there. Their liabilities were all short-term and so when the interest rates went up, as you said, if you marked the long-term bonds to market, they had huge capital losses there. They then had huge increase in expenses on their things and what it did was it flipped them upside down. Now the reason they went first so much is they'd had a very steep growth path before they got into this and so other banks that had leveled would not have been nearly as predictable catalyst for the crisis as Silicon Valley. There were other sorts of funny things in Silicon Valley Bank. The owner of the Silicon Valley Bank was on the board of the Fed, San Francisco Fed. I don't think that means anything but there was also an issue of whether the supervisory group at the San Francisco Fed did their job correctly. I am absolutely certain they did. They just went through their checklist. They knew what every asset was and they could see how these marked to market. So that's what sort of triggered Silicon Valley Bank but it's only one. Once that trigger hits Silicon Valley Bank, let me just tell you those bonds don't disappear. The bonds don't all of a sudden get a new coupon interest rate. They're out there and as long as interest rates stay high, the mark to market value of those bonds is going to be low and that's just the nature of things. And when you look at it, if you were a deposit in Silicon Valley Bank, you too would have been running for the for the firescape and that's exactly what they were. I think it is humorous that multi-billionaire Silicon Valley executives are standing up with their hands out, help me, help me. I think that's a great image. Of course, what happened then was you had the catalyst occur there and now you see what happens with Credit Suisse and all the it's spreading. If you look at Republic Bank, you look at Zion's Bank, you look at some of these others, it's not stopping here because the intrinsic problem has not stopped. The asset bonds are still out there. They're still at the same nominal yield. The liabilities are still out there. Anyone who wants to hold a deposit in a bank is going to get paid competitive deposit rates and so therefore the expenses are going to be higher as long as interest rates stay higher, go higher. You've got an endemic banking system problem, Kathy, which I do agree with you on and that endemic bank banking crisis has to be solved with a core solution, not an overnight solution. The core solution has to be monetary policy and fiscal policy, otherwise it will not be solved. We do need a Paul Volcker, we do need a Ronald Reagan to give us the intrinsic solution to lowering inflation for over periods of time, but let me tell you if I had been Janet Yellen on that Sunday night when they made the decision in Silicon Valley Bank, I would have done exactly what she did as a short-term palliative to solve the problem. I would have guaranteed all deposits at the bank. In fact, what I would have done where

I were the Fed and the Treasury in line with their drawing facilities, I would have guaranteed all deposit at all banks in the US at that time, irrespective of size. You do not want depositors as a bank to be the most expert analysis, the solvency of the bank, and the last thing you want to have happen is you don't want a liquidity crisis to morph into a solvency crisis. This is the, you know, when I saw you referenced it on TV the other day, and thank you for giving me credit for it, but it's the old adage of the banking system in the 19th century. In times of crisis, discount freely, and that is exactly what the Fed is supposed to do in times of crisis, but what we need to have, Kathy, and what you've been the shining light of doing, is we need to have a stable-valued numeraire, not a stable quantity numeraire, but a stable. We want the government to set the value of a unit of a numeraire,

and then let the banking system and the other financial markets develop around that stable value. The reason you need a stable value is because commodity sellers and buyers need to know what the price level is going to be a year from now. We need bond people need to know what the value of it is when the maturity of the asset comes due. We need to know what that is, and slight missteps in the balance between values can cause enormous damage to credit markets, to investment markets, to the monetary system. So that's where we are today. I don't think the system's over, and I have always been a huge fan of yours with regard to cryptos, saying that I don't understand them like you do, Kathy, and please, that is really, really true. I understand old-timey stuff will really well, but the one thing I would like to ask you about is how can we get a crypto that has a stable value rather than a stable quantity? When you look at any Bitcoin or any of these others, they're all controlled the supply of the phenomenon rather than the value. We need to have a price rule, not a quantity rule. So I'm going to come back to crypto in a minute, but just really want to finish on the-and I know it's part of the monetary discussion—I'd like to go back to the yield curve and to the treasury bond yield at 3.6% the 10-year. What is that telling you? What are the signals we're getting from the yield curve and from the bond market? If you're asking me that question, I would have said 20 years ago you have the market's assessment of the expected nominal return over the coming 10 years. If you combine that with the TIPS yield, which is the Treasury Inflation Protected Security yield, that's the expected real return on a unit of capital over the coming 10 years. You take the two of those, you deduct the one from the other, and you have the expected rate of inflation and the expected real yield, which add together to give you the expected nominal return. It's a multiplicative function there. I don't know that that's true anymore because of the Fed's holdings of government securities, and the movement is that the total debt of the U.S. has gotten so short-term that there are very few buyers and sellers out there in the long-term market. The Fed is so focused on buying and selling long-term bonds that I don't know that those interest rates today reflect really true market expectations because of huge intervention on the part of the Fed in buying up those bonds in such a small supply being left out there in the marketplace. But it seems to me, okay, they're now into quantitative tightening, so they're actually selling, and yet the Treasury bond yield has gone down since last October. It peaked at 4.3 percent, now we're at 3.6 percent, and I've always thought, I mean, bondholders have to be the most focused on inflation. I mean, long-duration. We should as well. We manage long-duration assets,

and the 21 and 22, as fears of inflation and interest rates were rising, were just killers for long-duration assets. Last year, the bond market, last year was the worst year for the bond market since the 1780s, so we have never had a bear market in bonds like that. Now that is turning around, and we've seen the long-term Treasury go from 4.3 last October to 3.6 roughly, and the way I

look at it, a bond investor is trying to protect himself or herself from inflation. They're trying to protect, and so that market, I believe the tips-implied inflation rate is about 2.1 or 2.2. Something like that. It's very close to that. It's very close to that, and it hasn't deviated very much from that. I think it got to 2.5 or 6, something like that.

All of the variation has been in the expected real yield, all of it, which is exactly what you're saying. Right. The whole structure is so low. Let me try to give you an answer to that.

Remember, I'm far from accurate. I make lots and lots of mistakes, so please forgive me, but this is the way I see the issue right now, is yes, the Fed has been enhancing the supply of bonds in the open market, which you would expect that would cause the price of the bonds to drop and the yields to go up, and they've done just the opposite of that. They've gone way down. The reason I think of is that there's a flight to quality that people are worried about banks. They're worried about really having their deposits guaranteed by the Fed, and so as they fly to think, they go out and buy the bonds themselves rather than holding a bank's assets, which then in turn buys the bonds, and so they feel much more secure in the value of their assets, and so that increased purchases has dominated the supply effect of the Fed trying to run off the balance sheet, lower their balance sheet, which is still very, very, very, very large, running it off there, and so it's more than offset it and caused the price of the bonds because of panic buying of government securities, which has pushed the price of the bonds up and that yield curve down. But once they've stabilized, once you've got all the panic buying of those bonds out there, and you can really do a great deal at, let's say you've got a \$10 million in deposits as banks, you can get a very nice yield by owning government bonds, short-term government bonds. There are all sorts of bond funds that you can own and still get a damn good yield, maybe a three, three and a half percent yield on those and have it almost as liquid as cash. You can get your money out of it in three days and it's government bonds, so there's a natural for it. There's any sort of smell of fear they'll go and buy these, so that I think is what's really caused the rates to drop so sharply. It's not because of the Fed selling bonds, and it's not because of inflation, it's because of, my God, I'm not going to get my money back from a bank. And this is the equivalent of those friends of yours out in Silicon Valley Bank, give me my money, give me my money. That's how they get their money out and then they put it in these short-term bond funds. Now Janet Yellen has come out and said, hey, we're not guaranteeing everything out there. What do you think the results of that will be? And here, what I'm getting at here is playing off your last comment, sort of the MV equals PQ argument. When people are afraid, they tend to recoil, they don't go out, they're not as free-spending. The rate at which money turns over comes down. We saw it crash during COVID. And what's interesting, we're watching velocity very carefully, and if you look guarter to guarter, it is starting to tip down again. It had a little bit of an uptick, and now it's starting to tip down again, which would be consistent with the fear you're talking about. Do you believe, I mean, when I try and explain to people what's going on here, money times velocity equals price times quantity, so money times velocity equals nominal GDP, right? And you've got money negative, M2 negative, it looks like for March it'll be minus 3% on a year-over-year basis. So money is down. In order for PQ to remain up, I think it is about 5.5% for the first guarter, that V will have to increase, not decrease. What do you, are we looking at a hard landing? Well, let me go back a little bit on your MV equals PQ, which is correct. You've stated everything perfectly there, but let me go back a formula earlier. M equals monetary base times money multiplier. So let's take it back in the olden days where there was gold and bank reserves. So when gold happens is people get panicked, and gold is the first refuge of the cautious, and so they move into gold, and then what you have is the money multiplier will by itself reduce M, which is what happens in panics historically. What you find happening now is the money multiplier times what I call the monetary base,

or government securities, has been contracted sharply, and that's why you find M coming down, is the monetary base has not come down. Basically, it is not, but the money multiplier has because people have lost faith in inside money as deposits held at banks. So you see a run for the exit sign going on there. That's what you see happening here in the US, which is a classic sign of something desperately going to happen to Q. That is clearly a sign of that. Now, what happens to P? I would imagine that will be bringing down inflation as well. There are two ways of bringing down the price level, and let's just do a simple market. Apples, you have a demand for apples, you have a supply of apples, and what happens if you reduce the demand for apples? Let's say we find that apples cause cancer. All right, if apples cause cancer, there'll be a huge reduction in the demand for apples. It will move us down along the supply curve. You'll get demand crush, you'll get lower prices, and you'll get a smaller quantity. And of course, if we find out apples have certain hallucinogenic gualities that everyone wants, you get an increase in the demand for apples, it'll move up along the supply curve, you'll get a higher price level, and you'll get an increased quantity of apples. That is the Keynesian view of all markets. Everything is demand driven. The way you have to control inflation is to crush demand, move that demand curve down along the supply curve. You get lower prices, but you cause a recession, depression. There's another way of looking at this, Kathy, and it's equally as valid. It has equal gravitas with the demand model. It's a supply model. Let's imagine we have a bumper crop in apples. We have

a great season this year. Apple trees are fused with apples. They planted more trees, and we have a huge increase of bumper crop in apples. What happens to the market for apples? Well, what you have is they've shifted the supply curve out. And instead of moving down along the demand, supply curve, you move down along the demand curve, you get a lowering of pot prices because you get an increase in supply, but with an increase in guantity. What this Fed should be doing, and likewise, if you have a shortage, you'd be a bad apple crop. If you're a bad apple crop, you'll get a reduction in the supply of apples and a higher price with a lower quantity. There are two ways of approaching macroeconomics. One is to crush demand to get prices down, and the other one is to augment supply to get prices down. The difference between the two is the first one, you have a depression. The second one, you have a boom. And that is exactly what we did under Reagan. We had Volcker control the quantity of apples. We had Reagan controlling the demand for apples, and we had a huge reduction in inflation with a boom in the economy. That's where we want to be. And what you have now in this situation is you have all of these people in Washington wanting to crush demand. I don't trust Janet Yellen speaking as an economist, pure and simple, or anyone else in any administration. Once you take a paycheck from an administration, why I've never worked for a president since Nixon. I didn't work for Reagan. I didn't work for Thatcher. I didn't work for Trump. I didn't work for any of them because once you take a paycheck, you're an employee, and you must support your team. These people will rebut arguments, Kathy. They know to be true in order to curry favors with their political

benefactors, and we all do that. And what you have happening here is I think the inside money system is suspect now, and I think demanders do not want to own deposits held at little regional banks anymore. They've shifted to the large major banks, and they've also shifted to the monetary base itself, which are Treasury securities out in the marketplace. And you've had a shrinkage of the money supply, not because of any Fed policy doing it. It's because people

are panicked and are going towards gold, and you're signing banks going upside down just as you described earlier. That is where I see the system. It's a problem. But do you see my point on the money multiplier? Absolutely. The money multiplier is where I think the action is, Kathy, much more in the mpqv situation. Yes, yes. No, no, I understand. And it really is saying the same thing. I mean, what's so puzzling about this demand-destruction view of the world in terms of getting inflation down is if you look at the 80s, 90s, even into the early part of the 2000s, the Phillips curve didn't work. I don't know why people are still using it. It is a very crazy- But the Laffer curve does. The Laffer curve works. Thank you, Kathy. Thank you. Did I fish for that compliment? No, no, no. I should have said it myself. That was- No, I had me have fun with you. So, but if you look at the- and I live through this as a young economist, invest, then analyst, then portfolio manager, I was watching the debate, the Phillips curve debate, the demanddestruction

view of the world versus the supply side view of the world. Supply side one, we had inflation and interest rates coming down consistently. Sure, you had your cyclical movement, but trend-wise, inflation and interest rates coming down as growth was pretty strong. Through the moon. Through the moon. And I am puzzled why Phillips curve even exists in people's minds. Harvard teaches it. Yeah, that's- That's the only reason it does. And there's a point there that they do make- and Larry Summers is no idiot, believe me when I tell you that. He's a very smart man. And he is right. You can crush demand sufficiently. Finally, you will bring prices down, but at horrible, horrible expense. Our view is you can bring prices down by making the economy more prosperous. And it seems obvious that a bumper crop in apples will bring the price down. It seems obvious to me that a bumper crop in apples increases the quantity of apples as well. But no, no, no, they just won't go along with it. Well, and there's another problem. We're dealing with economic statistics that the Fed is relying on. There you go. That we're born in the industrial age. We're in the digital age. My guess is the innovation platforms around which we have centered our research and investing are going to create a big productivity boom. Their innovation solves problems. And productivity gains are potent anti-inflationary forces, right? Yes, of course. But what I would like to know, pivot to is crypto. Yes. It was fascinating to me and to our analysts. We have three crypto analysts. We have, well, we have 12 analysts. I believe

they are the best analysts when it comes to innovation in the world, bar none. And so we have three

analysts focused on crypto. And as this regional bank crisis became, or came into full focus, it was fascinating to see Bitcoin and other crypto assets appreciate as regional bank stocks imploding. They are just like gold. That is right. And in fact, Bitcoin, so back to your earlier comments about Bitcoin. Yes, and I remember when we were doing our paper, the one that you

collaborated with us. And we gave you the paper. This was the paper that Chris Bernisky wrote. He was our former

crypto analyst who handpicked Yassine Almondra, our new crypto lead. And I remember you tore the paper apart from an economist point of view. No, no, it was fantastic for us. It was absolutely fantastic. Why? Because it got us to the point where I said to you, art. Now, this is when Bitcoin was at \$250. Today it's at \$27,000. Yeah. And so it was a \$6 billion network value or market cap.

And today it's nearly half a trillion. But I said, when it was at \$250, I said, art. How big? This is a big idea. How big could this be? And your answer to me back then, 2015, was, well, how big is the US monetary base? And back then, it was four and a half trillion. And I said, wow, this is a very big idea. And there were very few ways for us to put it into our portfolios. We needed to find GBTC. So I battle tested it personally as we were doing our homework. And, you know, just bought a lot because it was a very big idea. This is innovation at its best. And everyone's dismissing it. In fact, when we put it in our portfolios, we were fairly new to the world then. And, you know, people dismissed it. Can you interject here? The one thing that always bothered me about Bitcoin and all these other cryptos, and forgive me for this, is why don't they find an algorithm that guarantees the value of the unit and lets the quantities vary rather than controlling the quantity of the unit and letting the price vary? People care about price stability over the long run. When I make a contract with someone for 20 years out, I want to know what the value of the

unit numeraire is going to be back then, not the guantity of it. I want to know the value of it. And why can't these little geniuses, all you people with computers, I have a flip phone, why can't you find some cryptocurrency that has a stable value rather than a quantity fixed quantity? And that's what just bugs the living poop out of me about these cryptos. They need a value crypto, not a quantity crypto. So, I want to revisit what we said about gold, right? Bitcoin is a store of value. Yes, it's a store of value. It's an investment too. And an investment. So, limited to 21 million units. So, right now, the inflation rate is 1.8% per year. That's how much is mine. In a couple of years, that will be cut in half to less than 1%. And it'll keep getting cut in half until we reach that 21 million. We're at 19 million units right now. And so, to watch crypto go from 19,000 to, I think it got to almost 29,000 in the span of a couple of weeks, is proof positive that people do believe that it is a store of value, that the developers, the coders, the programmers who have built in this mathematical metering are not going to change it. So, it's a store, its role is playing one role of money. It's a store of value. There are others trying to leverage on top of the Bitcoin network and make it less expensive to use and faster. So, we'll see what happens there. But that's a store of value. The reason what you're talking about is unlikely to happen very soon. Well, there are actually two reasons. Last year in May, an algorithmic stable coin. So, it was called Terra Luna. I get mixed up, which was the actual coin. But it imploded. It was promising 20% interest yields. And I think we did a podcast with Doquan who headed it up and who's now on the run, by the way. And we did a podcast with him. And I listened to parts of it twice and I said, 20%. That was his explanation. It didn't make any sense in the world. And so, that was trying to control the price. That coin. Now, there are two others. There are a number of others. But right now, there's USDC, which is issued by Circle. And Coinbase and Circle are working together. This is the on-ramp and off-ramp. It's called a stable coin. And it's the on-ramp and off-ramp to decentralized financial services or internet financial services, otherwise said. And we are paying very close attention. It's pegged to the dollar. So, it's pegged to the currency that we are saying right now has an issue. But that peg is very important, in fact. But why do they peg it to the dollar? Why don't they peg it to Bitcoin? See, what I would expect to have, who's the biggest owner of Bitcoin? I don't know who it is. But if someone said, I'm going to guarantee you Bitcoin, I'll buy all you want at \$27,000. I'll sell you all you want at \$28,000 or whatever the price is. That's where you need to go. Gold

is not, does not have a guaranteed price. It never did. But gold was out there in a fixed quantity over the centuries. And why did it stabilize in price? Because governments were able to buy and sell and fix the price there and change it in such a way as to guarantee we need someone to take Bitcoin as the gold stock and then do the monetary problem on that, guaranteeing the

value and then being buyers and sellers of Bitcoin to stabilize it. And once it gets to that \$21,000, whatever you said, \$21,000,000 or \$21,000,000, whatever they are, bits, bits, bits, bits or whatever they call them, once they get there, then you have a stable currency and then you can have someone come in and arbitrage and guaranteeing the price. Because what we need to have out

of Bitcoin or any of the others that you're such an expert on, we need to have one that I can guarantee is the same value in goods and services, not in U.S. dollars. And I want to do my contracts in Bitcoin, not my contracts in dollars. I want to use Bitcoin to get away from using the dollar. I don't trust the dollar. I don't trust Janet Yellen. And if you look at what's happened, prices today are 50% higher than they were two years ago. I mean, they really are. I want to get to a value, a stable value, where Bitcoin rises with the rate of inflation and the value of Bitcoin. And it just keeps stable prices and never have to use the Fed. And I remember when we were doing the paper with you, you said, this is the monetary system I've been waiting for since we went off the gold exchange standard. And then we went through, wow, this is a big idea. And you said, back then, you've been very consistent. It's great. It's a rules-based monetary system. It's a global rules-based monetary system, even better. It's just got the wrong rule. They'll have to switch. Now, here is a fascinating question, because I've been thinking about it ever since you said that. It's playing the store of value role right now. And if the global monetary systems right now, shall I say, lose the confidence of people generally, there will be a shift to more crypto from a store of value point of view, certainly. So what will happen then is the price of Bitcoin, remember, there are only two million more to be minted, price of Bitcoin will go through the roof. And then, can you imagine, I can't, I think these developers, by the way, I've met the developers, the core developers, and they're pretty amazing. Yes, some are very young and have blue hair. And then, but then there are monetary scholars who are involved, and they're steeped in monetary theory. And I just know when the price, if it continues to escalate like this, they're going to turn their attention to this problem. How do we stabilize the price? And the question is, will they evolve the coding? I doubt it, given what I know. Can I ask you just two simple questions on what you've said so far? Number one, I really dislike the name crypto. It makes people think of secret messages during World War II and Nigma. You get all these bubble sorts and all that stuff there, which is magical. Anything that's transparent is much better than something that's crypto. And I want it to be transparent. And what you're telling me is there are 19 million Bitcoins now, there'll be 21 million, and here's how that product will go over the next five years. And once we asymptotically get to the 21 million, that's it. Let's call it just Bitcoin instead of crypto. Or digital assets is the broadcast. Digital assets are, is the broadcast. Digital assets, wonderful. But when you got secreted in there and Nigma and crypto, it just makes me feel awful. The other thing that makes me feel awful, and I know you trust the blue-haired young people doing this in their programs and all that, I don't understand it. I know how to do Fortran, Algal, Balagall, Fortran 2, Fortran 4, old timey

stuff. I do know them. But I have a flip phone. I don't have a computer. And I don't do emails. As you know, I don't. I'm old timey, but I am a monetary guy in there. And I don't know how to trust the programs unless they are totally divulged. And unless I can know with perfect certainty there's no one with a backdoor entrance or no one that has a blip in there. It's, it's, it can't be messed with. That's the part I don't know how to trust. It is transparent. It is transparent. Who can tell me the program that they do and how can they be positively certain? Now, I believed there was a time back when you could mine for bitcoins. And it costs huge amounts of electricity and all this sort of stuff. And my son-in-law did it, made a bunch of bitcoins. And, and I don't understand that part. Why isn't it just 21 million? That's it. Here are all the debits. Here are all the credits. You guys have 21 million. Go for it. Why do they have it continuing on to asymptotically approach 21 million? And why don't I know the program's just done? Well, this came out of the 0809 crisis. Yeah, I remember. Yeah. Satoshi Nakamoto, whom we don't know who,

who he or they are. We don't know. But in, in its wisdom started this out. And, you know, you know, everybody laughed in 2009, 10, and, you know, called it a Ponzi scheme. And we went through when we went, did our first report. What did we hear? Oh, well. I remember that. I remember.

But let's, let's go to that. Let's, let's hit back at that. It's a good time to evolve this ecosystem. And it's been very deliberate. And I actually think as we're all learning more about monetary policy, you know, we're, we're comparing it to what's going on in, in the world of monetary policy managed by governments. And so this has been an evolution. I know. But how do you have a question there? You know the people and you don't know them names and stuff. That's one question I have. And I'm not sure anyone can answer that one for me. One thing I would like to add to what you've been talking about at MV equals PQ that there do remember that crypto is a substitute money.

And therefore some, some portion of crypto should be in your M as well as the monetary base times the money multiplier equals M. There is also a crypto in there. So when you look at declining M2, you may not be seeing the declines you really believe you're seeing because the alternative money substitutes are expanding much more rapidly, which is what you and I have always wanted. Yes. A trillion dollars. That ecosystem is roughly a trillion dollars globally.

That's all. Yeah. What you've got right now on the monetary base is you've got the monetary base is about eight and a half trillion. So you're, you're getting to be a significant component of the monetary base. Absolutely. And so when you look at that, that's what you and I have always wanted to have happen is take away the government money and either put in a gold standard, which I love, or put in a crypto standard, which has a rules based model, which I also love. Both of those I think is what we dream of as being the future global currency. Yes. And I think it's going to happen. And I think part of what's going on right now, I don't know if you saw the, the president's annual economic report, it came out a couple of days ago. Yeah. And they went after crypto. Oh, big time. Big time. Digital assets all together. You know, no, no, they saw no role for it. Well, it has to be somewhat threatening, right? Of course, they're terrified. Yes. And so the, that, that part of the report was directed by President Biden one year ago. He asked all the various agencies, which may have a point of view or may be impacted by crypto

to, you know, send in their reports. And that's what they came out with. And they just panned the whole thing. I saw it. I haven't heard that. I honestly, I think, and we're seeing, we're seeing young people, especially, this is going to become a national election issue. This next year will become, you know, what they're doing. You know, they, they, the SEC issued Coinbase, a Wells notice. And so we're getting a sense of how they're going to come at Coinbase. But Coinbase is, has been prepared. They've been preparing for this. So I think this is going to go to the courts and the courts will take it, will give it to Congress where it rightly should be. And I think they're willing to take this all the way to the Supreme Court. But in the interim, I think this becomes a national election issue. I hope so. I hope so. I think it will. And, and we need to, we need to move outside of a national perspective on this and look at, and look at Bitcoin or whatever the one you're talking about as a global currency. It's not up to Congress to value gold. That's true too. But it's not up to Congress to allow or not allow crypto. It shouldn't be. Well, well, just look, okay, that's a very interesting idea. I like, I like how you're pushing the conversation here because I'm just, I'm kind of, I'm not blindsided, but kind of, not everything should be voted on. Right. Okay. So let's, let's think about this. Let's think about this. See, they can tell you, everyone listening knows that we did not talk about this ahead of time, but I love where you're taking this. But let's just, the, let's, can, the courts should, who should decide if the SEC should shut down all the particular ways to access crypto? Well, I don't think they can. Number one, if they can, we should have competition among sovereigns in the world as to where crypto should be located. We should have all sorts of other things there, but the government should not, should not determine what the price of wheat is. It shouldn't determine the price. It should, it should not, markets should be allowed to function. You should be allowed to hold crypto if you want to. You should be allowed to transact with someone else in crypto if you want to. And if I don't want to, I don't have to. It should be our choice, not some subcommittee of some farmer in Nebraska telling me I can or cannot do it. That's just not the proper role of democracy and regulation. Government has a limit and where it should be limited. And I love the limit. I love government. I think government's really, really important, but it shouldn't control everything. And you shouldn't vote on everything. I shouldn't vote on whether Kathy's allowed to have scrambled eggs for breakfast this morning or not. I mean, that is not where government role should be. And one area where government should not be allowed to be the determiner of whether you and I want to deal in crypto. But, but they are de facto doing that because they are going to the banks and saying, stop, have no, now these, these crypto digital asset companies are not putting crypto into these banks. They're running their operations with fiat cash. That's what the government is banning. I understand. That's crazy. But you know, regulations, how the portfolio of the banks are transparent and allowing people to see and allowing supervisors to sit there and talk about what the assets are and what the liabilities are and whether the bank is solving and do the stress to that's all fine and good. But then telling them they can't do \$1 bills, but you can do \$5 bills. No, no, no, that's not where they should be. The government should be one to provide us information and transparency, not to control what we do. I agree. Okay, so let's go back and see how this is going to play out. So one bank, Coinbase had, I think it was five banks that it was interacting with. Silvergate was one of them. They got their money out before that imploded. They saw the writing on the wall. And let's see, Signature was another one. And again,

the government went in, you know that story, the government went in and even Barney Frank, the Frank, he was on the board and he is saying that the government did this because of crypto. I think crypto, the last we knew crypto accounted for 18% of its crypto related companies, their fiat operations accounted for 18%. And yet the run started and, you know, the government's antagonism to crypto, digital assets was part of the reason. And by the way, you talk about transparency in the banking system, it was very, it was transparent to see a year ago, which is why credit default swaps started moving up the insurance policies against bankruptcy that held to maturity securities at banks like Silicon Bank were yielding 1.6%.

And the deposits were starting to move down, not because there was capital flight. It was because of a venture capital funding drought. The company's banking with Silicon Valley Bank had to run down

their deposits because they weren't having any liquidity events, funding had dried up. And so that's how that started, right? And now it's cascading into other banks. But it was plain to see that their deposit base was going down. It was plain to see what their assets held to maturity assets were yielding 1.6%. And it was plain to see that their short term, their long term assets is you couldn't liquefy them. Then you'd have to mark them to market. What you have to do in the balance sheet of a Silicon Valley Bank is you've got to mark them to market. You can't look at their maturity value and they didn't do that. And of course, mark to market, they suffered huge losses

on those. Of course, but this held to maturity concept came out of a way or not. It's such a silly concept. But do you understand what the government said? The ethanol problem was all of hold the maturity. Yes, they've repeated the mistake. So what they're saying is these securities, good, good is the government, right? So you're going to get your money back. So you're going to mark to market because you will get your principal back. 94 years from now. No, maybe 10. But anyway, when you're 82, like I am, is a very different number than 10 when you're 22 like you are. Oh, art. This is now bringing my age into it, which of course, everybody has a field day. I'm very proud of my 67 years. So I've earned every wrinkle and so forth. Anyway, so what I'm saying is the government, I mean, the market saw this problem evolving more than a year ago, right? They saw it. Why didn't they do something about it? Because they don't know what they're doing, Kathy. They just don't. Who in their right mind would have a \$6.9 trillion budget? Who in their right mind would have a Fed with \$8.5 trillion on their balance sheet? Who would have a marginal tax rate in California, 55% on income? It's stupid. The next podcast we want to do and I want to do it really soon is on my book, Taxes and Consequences. I want to do that

because it's equally as interesting as now is what actually happens when they go and tax people this way. When governments are stupid, don't be surprised if people try to get around them. And what you get is a very bad economy and that's exactly what you're seeing here in monetary policy.

It's exactly what we found in our book, Taxes and Consequences. It's just perfect example. So, I mean, I would really love to do a podcast with you on that. I think it would load the pot. That's a deal. And I usually end our podcast saying something like what you just said, and I'll give you a chance to say that in a minute. But here in Florida, there are rumors. I don't know if they're true. There are rumors that Governor DeSantis is going to work with the

banking system in Florida, the state-regulated banking part of the system, and open them up more to crypto. Just like with your book, as we know from your book, Taxes have consequences. If he were to do something like that or any other government, then I think you would see a huge migration of the crypto digital asset world into Florida and into Florida banks. I think you're totally right on that. And this is just the hostility and antagonism of government trying to stop something that has been successful and is threatening their monetary incompetence by going circumventing it and just bang angrily coming out like in the economic report of the president this time. And I hope DeSantis has success in allowing alternative... Just a rumor. We don't know. But you don't have to do it if you don't want to do it. You can be in a regular bank. I don't have to own crypto or not own crypto. No, I own crypto only through you. I'm not smart enough to understand what it is or how to do it. I'm old. I drool and all that. But there's nothing wrong with giving people freedom. There's nothing wrong with giving people choice. They're your assets. They're your life. It's your life. Let people use crypto if they want to. Now, I do like it. I do like it regulated with respect to transparency. I think there's a huge role for government to take. Here's what the thing is. Here's what it is. Here's the program, all of that. But they shouldn't try to attack it or control it. They should let people with full information decide what they want to do. That's what freedom is all about. So, absolutely. That's why my parents moved to this country. Ireland was free, but this is the land of opportunity. Now, you know why everyone's investing in Ireland because the capital is always Dublin. Ireland and Dublin, and their tax rate, you, I know, consulted, I believe with Ireland to get that, what is it, 12% tax rate, hopefully is not going away. But just, I wanted to say one more thing. This is really important. The government is hiding behind the FTX implosion last year. See, I told you. And what they don't understand is the entities that went bankrupt last year, Celsius, 3AC, FTX, they were all centralized and opaque. You couldn't see. Crypto, digital assets, the ones that we own, are decentralized, and we're developing a metric to measure decentralization and transparency. They are decentralized, they are transparent, and they are auditable. So, you could go in if you were an expert programmer and audit exactly how it's set up. So, this is the world you have been dreaming about. It is, it is. And I trust you for understanding the intricacies and the operations of it. I don't, Kathy. I don't understand it. As I said, I have a flip phone, but I trust you inordinately. I remember when you first came into my class, you're one of the most brilliant, wonderful analysts I've ever seen. And, you know, I've had a fun ride riding with your investments going forward. And people should look at it. They should judge their own portfolios, their own abilities to take risk, their own abilities to have a medium of exchange, a store of value, and investment. And that, I believe, is the right way to go without Janet Yellen or, for God's sakes, Powell telling us what to do. That just my biggest fear. You know, I'm three years older than Biden, and I understand the problems with age.

Oh, boy, do I, you know, I resemble those remarks.

So, my biggest fear, and I know we want to leave this on a light note, but my biggest fear right now, and this is an important moment in time. And that's why I bring Congress and I bring, you know,

I bring Congress and the courts into it. My biggest fear is we are going to lose innovation. We're not. We're not. We're not. No, you may lose the battle today, but we're not

going to lose the innovation. The free market individuals are much greater than government. They really are. You have done an amazing job of showing that, Kathy. Now, we may not win every battle. We may not win every time, but sooner or later, bad monies are disappeared from the face of the earth, and good monies are held. And as long as the Fed doesn't do a good job in maintaining the value of this money and the usefulness of it, and it's all deregis controlling you, controlling you, as long as they do that, we will ultimately win. Believe me when I tell you. And I don't know if it's Bitcoin. I don't know which one it is or how it is. You know that stuff better, but we will win. And we always do. The highest tax rate in 1944 was 94%. Today it's 37%. That's a win. In 1976, there was one state without a state death tax. Today, there are 33 states without death taxes. I could go on and on. When I was a kid in Cleveland, Ohio, you could walk on Lake Erie. Today, it's clean. The fish are all back. You know, the air in Southern California and the Central Valley, you know, there is all. We are winning, winning these battles. We do have setbacks, but don't ever lose your faith. We are truth, beauty, and the American way. And because of you, Kathy, that's what's happening. That's why I'm your biggest fan.

And I'm going to let it be. That'd be the end of it, because it's the truth, and it's the whole truth, for goodness' sake. Oh, thank you, Art. You are wonderful. You've made me feel so much better, because this has been a dark period for art. It is a dark period, but dark periods are what give sunshine its meaning. Absolutely. Absolutely. Oh, see why, everybody, see why in the midst of a crisis, I go to Art Laffer, and he just puts everything in perspective. Brilliant. Thank you, Kathy. Brilliant. Thanks so much, Art. My pleasure. You have a great day, and I'll see you soon. But let's do that podcast on tax. I would love to do one on taxes. You would find that one really as helpful as this, by the way. Yes. Everyone go buy Art's book. Taxes have consequences. And it is all part of the same discussion. It is. It's all part of how do we get freedom and economics in another way, and how do we use individuals to create prosperity rather than governments to crush it? That's all. Thank you. Thanks, Kathy. Thank you. Thank you, Art.

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