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by Arc to buy, sell, or hold any security. Clients of Arc investment management may maintain positions in the securities discussed in this podcast. Hey everyone and welcome back to FYI, the four-year innovation podcast. I'm Michael Kroemer, product marketing manager here at Arc. On today's episode, we'll be featuring our CEO, CIO, and founder,

Kathy Woods, special year-end edition of In the Know, which we published last week, in which Kathy answered investor questions ranging in topics including general market conditions, inflation, deflation, corporate earnings, interest rates, disruptive innovation, Arc's investment process, supply chain, and the outlook for 2023. We hope you enjoy today's episode.

Greetings everyone. Well, I am here once again. Didn't expect to do an In the Know, but we have been getting a lot of guestions now that we're approaching the end of the year and everyone's thinking about what will next year hold. I'd like to take a moment to answer those questions. This will be pretty quick compared to the typical In the Know, but we were getting enough questions that I felt, okay, let's just do this one more time. The first question, our market outlook for 2023, inflation, interest rates, corporate earnings, and how innovation should fare in that environment. Okay, well, we know that we're getting a lot of deflationary signals, but the Fed isn't really buying into that yet. But we think that the bond market, though, will start to convince the Fed. So the bond market is telegraphing either much lower than expected inflation or recession or both. And we've seen the 10-year Treasury bond yield drop from four and a guarter to three, it got down to 3.45, it's around 3.6 right now. So that doesn't leave very much room. If you assume that the long bond is kind of a proxy for how fast nominal GDP will grow, it doesn't leave enough room for much growth and inflation. And we also know that the market always leads the Fed. And I think the bond market is speaking very loudly. Jeff Gundlach, very interestingly, double lines, famous bond investor, very, very successful. He has made the point, okay, it does look like inflation is coming down. Why is it going to stop at 2%? And we would agree with that. We're seeing a lot of deflation in the pipeline, commodity prices, discounts at retail during the holiday season to clean the shelves of massive inventories. So we think that's going to show through in terms of inflation. And very importantly, housing has taken it on the chin this year. Usually the Fed is very sensitive to that. Autos as well. They really went nowhere and now used car pricing is down 14% on a year-over-year basis. So inflation will come down. And innovation actually is going to be part of that equation. The truly disruptive innovation platforms around which we have centered our research. So gene sequencing, robotics, energy storage, artificial intelligence, and especially artificial intelligence, as well as blockchain technology, all of them are deflationary in nature. Good deflation, it should cause a boom

in the products and services associated with innovation. But deflation, another source of deflation. So our confidence there is building. We've been right on the inventory bill. The commodity price decline. And I think normally the market would have responded already. The market is waiting for the Fed. And we think the Fed's rhetoric will change first and then its actions will change. And we think that's all going to take place in 2023. Now, another guestion. Given that our strategies from their peaks have dropped anywhere from 60% to 80% since February of 2021. So this has been almost two years. Why do we not turn defensive like most managers are doing? Well, there's a very important explanation for that. We do one thing. We do not pretend to be an asset allocator. Our research and our investment investments are centered on disruptive innovation. And so when advisors and individuals choose our strategy, they're not choosing it alone. They have more diversified portfolios, of course, including real estate. The biggest asset most consumers have is housing. So we are one part of an investment portfolio. And therefore we would never be using cash. We would expect advisors and individuals to basically raise cash and segregate it from their investment portfolios. In terms of our strategies, we during downturns concentrate towards our highest conviction names. And so we have been doing that now for nearly two years. And the history, history would suggest, and we have a paper, a white paper on our site about this, that that concentrations strategy plays out very well in the subsequent rebounds. And we do think this rebound will be quite powerful. This year has been the most difficult year of my career, worse than 0809. And I would venture to say that it has been the most difficult year of many investors' careers. The only thing that worked this year was energy. It's up almost 50%. And many people are asking us, why don't we diversify into energy since it's working?

Well, the reason for that is we think it will stop working. If our forecasts for electric vehicles and autonomous taxi platforms are correct, then oil demand could drop by roughly 30%. 30 million barrels a day during the next five to 10 years. And we believe that demand destruction has already started. It looks like oil demand peaked in 2019. And we're still in the process of peaking out, I would say, in the 100 million barrels per day range. But we think the resolution of that basing period here is going to be down. So we wouldn't be investing in energy. And we think the indexes that have rebalanced and now are including more energy are mistaken. And those investments, that rebalancing will not work out. Now, another question. You have been buying more Tesla and other stocks during the downturn. And yet the prices have fallen further. And our performance decline has worsened with interest rates and prices fluctuating so widely. And in this case, they probably mean increasing. Will an investment focus on innovation work? Well, we believe that the leading indicator correctly is inflation and it has peaked. The inflation rate has peaked. Almost every measure of inflation has peaked. Most of those metrics peaking out in March or June of this year in the first or the second quarter. So typically, that's a good thing for innovation. But as I just mentioned, I think the market is so skittish and has been so terrorized by the most rapid increase in interest rates ever. We have never seen an 18-fold increase in interest rates within one year. It has truly terrorized the markets. And I think that the fear is palpable. In fact, I think according to the Bank of America surveys, recent surveys of fund managers and advisors, it's probably the advisors, we haven't seen this amount of cash on the sidelines

since I think it was 2006, maybe even 2001. I do know also the same survey shows that the put-to-call

ratio in the U.S. market, meaning those short relative to those long put calls, is at 1.5 now and it has not been that high since 2001. So we have an incredible amount of fear in the market and that actually is the best time to average into these markets. I remember in late 2020, early 2021, we could do no wrong. Anything we said was gospel at the time and I knew that that wasn't right. And at the time, I remember saying, keep some powder dry. It is for these moments or averaging down

throughout a period like this that one keeps the powder dry. This period seems to be the flip side of the late 90s. The late 90s was an irrational increase in tech stocks, appreciation in tech stocks. And it was incorrect. The technologies were not ready. And even if they were close to being ready, the costs were way too high. So technology is not ready. We didn't get the cloud till 2006. We didn't get the big breakthrough in AI, deep learning, until 2012. The cost for DNA sequencing, \$2.7 billion for one genome back in 2003. That number is down to \$500 now. We are ready for prime time and yet investors are doing the opposite of what they did during the late 90s. They're running away, running for the hills, running for their benchmarks. And we think that innovation is going to pose a problem for the benchmarks. So you bet we think innovation is going to work. We think it's going to work in a big way. We are ready for prime time for these five innovation platforms. Another question, investors seem hesitant to invest now for long term growth given supply chain disruptions and the economic downturn caused by rising interest rates. Why do we believe that now is a once in a century investment opportunity? Well, a couple of reasons. Innovation solves problems and we have a lot more problems now. Even more than during COVID, we have corporations now experiencing margin pressure and we have individuals.

consumers perhaps worrying about their jobs. And when we get into a period like this, businesses and consumers are willing to change the way they do things and they embrace innovative solutions to their problems. Now, this once in a century is not an understatement. We have not seen more innovation platforms evolve at the same time ever. The closest

is about 100 years ago, telephone, electricity and automobile. Interestingly, back then, we were just getting over a pandemic, the Spanish flu, and over a war, World War I. And at the same time, we were experiencing incredible innovation. And so very similar dynamics and what happened? Inflation peaked in June of 1920 at 24%. And within one year, it was minus 15%.

We think we're going to experience a mini version of that during the next year. And then what happened?

We launched into the Roaring 20s when the stock market had, I believe it was compound annual rate of returns of 25% for the next eight years. The Roaring 20s, we think we have a setup here for the Roaring 20s. And it is all around innovation. So again, we do think about you every day. We are heavily invested, not only in our own funds, all of us at ARC, but in our own company. We truly believe that our research is the best on innovation in the market. We give it away. Most of our naysayers, I would venture to believe, do not read our research because it is compelling and it is centered on Wright's law, which has served us very well over the years. So it is darkest before the dawn. And the best time to invest, according to Warren Buffett and the great investors of our time and of all time, is when there is so-called blood in the street. It's a crude saying, but it means when markets are deeply into bear territory, you should have, there's a cycle of fear and greed, and both are healthy. The fear should occur at the top of cycles, taking profits,

and the so-called greed part of that dynamic should occur at the bottom of cycles. And surely, after maybe an 80% reduction on average in our various strategies, we are closer to the bottom, certainly, than to the top, as we were in February 2021. Then we said spare some powder. Now we would say continue to average in with that powder. So with that, I wish you a blessed holiday season and we'll look forward to sharing more thoughts and ideas with you in the new year. ARC believes that the information presented is accurate and was obtained from sources that ARC believes to be reliable. However, ARC does not guarantee the accuracy or completeness of any information and such information may be subject to change without notice from ARC. Historical results are not indications of future results. Certain of the statements contained in this podcast may be statements of future expectations and other forward-looking statements that are based on ARC's current views and assumptions and involve known and unknown risks and uncertainties

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