FRMO Corp. Q2 2023 Conference Call
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Thérèse Byars – Corporate Secretary

Good afternoon, everyone. This is Thérèse Byars speaking, and I'm the Corporate Secretary of FRMO Corp. Thank you for joining us today for the company's 2023 Second Quarter Earnings Conference Call. The statements made on this call apply only as of today. The information on this call should not be construed to be a recommendation to purchase or sell any particular security or investment fund. The opinions referenced on this call today are not intended to be a forecast of future events or a guarantee of future results. It should not be assumed that any of the security transactions referenced today have been or will prove to be profitable or that future investment decisions will be profitable or will equal or exceed the past performance of the investments. For additional information, you may visit the FRMO Corp. website at frmocorp.com.

Today's discussion will be led by Murray Stahl, Chairman and Chief Executive Officer and Steven Bregman, President and Chief Financial Officer. They will review key points related to the 2023 second quarter earnings.

A replay of this call will be available on the FRMO Corp. website until the summary transcript is posted.

And now, I'll turn the discussion over to Mr. Stahl.

Murray Stahl – Chairman & Chief Executive Officer

Thanks, Thérèse, and thanks everybody, for joining us today. Before I start talking about FRMO, I just want to acknowledge the ultimate founder of FRMO, who was an attorney named Lester Tanner. He passed away a couple days ago, and Sunday was his funeral. He was an incredible, unbelievably brilliant and warm human being, and we probably wouldn't even have an FRMO Corp.—or I should say we definitely wouldn't have an FRMO Corp.—were it not for his leadership and insight. If we had more time, I would tell you about his amazing life, in which he did amazing things even in retirement. So, I just wanted to acknowledge him as a human being. He'll be sorely missed. He was a great guy. He's one of a kind, and we're going to miss him dearly. Anyway, we're never going to forget him, and we shouldn't.

I'll go into the FRMO financials, now. As you can see, the quarter was pretty good, at least I think so. Shareholders' equity is $224 million, which I believe is a record. We've got plenty of liquidity. We've got $36 million in cash. We have a de minimis, or at least I think it's a de minimis, amount of debt. That debt, incidentally, relates to the building that houses our investment in HM Tech, one of our various cryptocurrency investments. More about that later.

I want to focus, this quarter, on the development of our strategy in cryptocurrency. I'll first touch on Horizon Kinetics, though. Horizon itself has done pretty well for the year closing December 31, 2022. We collected a number of performance fees and a fair amount of that income, therefore, is going to spill over into FRMO's revenue in the next quarter since, as you will recall, we have our revenue share in Horizon. There are also FRMO's investments, which are very comparable to Horizon's investments, so they're going to have very similar kinds of performance, so expect some good news there.

And you'll recall that everything with regard to Horizon is reported with a lag. So, our next quarter, which is the quarter ending February 28th, is going to reflect Horizon information as of December 31st, just for your edification. I know we've said this many times before, but just bear that in mind. There's always a lag. Right now, from the Horizon point of view, FRMO is reporting data that are really as of September 30th, even though our financial statements are as of November 30th.

Now, as you may recall, we entered cryptocurrency, you might say, gingerly, and we were particular in maintaining that posture in the past year. In the past year, other than maybe the last week or so, cryptocurrency, led by bitcoin, basically declined tremendously. The prices of cryptocurrency mining machinery declined even more, and there were cryptocurrencies that fell even more than bitcoin.

The reason for that, as we'll cover later in more detail, is a function of three economic vectors that really govern the price of cryptocurrency, particularly bitcoin. You can bid cryptocurrency up, but you have to be very cognizant that there's always an upcoming halving. The halving basically means that the block reward for mining bitcoin is going to be cut in half; that's why they call it the halving. And that's coming in about 470 days. In the case of Litecoin, I think it's 198 days, if I'm not mistaken.

In the world of mining, you're always or should always be preparing for that. In the prior year, people not only didn't prepare for it, they also didn't realize that as we approach the halving the equipment used for mining is just worth less. So, the idea of bidding up crypto mining equipment is a very bizarre idea, and we did very, very little investing in crypto. Now, the market is more or less properly discounting the halving, so we're much, much more inclined toward investing.

In our cryptocurrency exposure, apart from that which we own directly and indirectly in the funds, we have four cryptocurrency investments. I'm going to just mention them because we don't really highlight these things in the financial statements. One is called Consensus Mining. That is the result of merger of the original HK Cryptocurrency Mining partnerships and a capital-raise, because we did an offering. Consensus Mining is going to be listed and tradable in the not-too-distant future. I'm guessing, but I'm thinking 60 to 75 days from now, maybe sooner. So, for Consensus Mining, watch for it to start trading, and we own some shares of that.

There's also Winland, previously called Winland Electronics. Now, it's called Winland Holding because it's holding a variety of cryptocurrency investments in addition to its traditional business. I'll read all our cryptocurrency figures and other investment figures in a moment.

We own a 7.1% interest in HM Tech (Hashmaster), which has a number of facets. It is a mining equipment repair company. It's also a hosting company for mining. It's our default mining site, so if we don't want to or we cannot or we find it disadvantageous to be in other sites, we can always retreat to HM Tech. We've done that more than once when we couldn't get terms that we needed, and of course HM Tech repairs our equipment. Also, there's some HM Tech mining for its own account.

And lastly, we own an investment in Digital Currency Group, which is a long-term investment for us. Since we bought it, it's done fairly well.

And then, we have the following investments. I'm going to mention TPL in a minute, but let's just go through the various cryptocurrency elements. These are the implied holdings we have, so to speak, meaning our pro rata share via partnerships.

We have 596,936 shares of the Grayscale Bitcoin Trust, GBTC. We have 4,287 Grayscale Ethereum Classic Trust; ETCG is the symbol. We own 27,186 shares of Grayscale Bitcoin Cash Trust. BCHG is the symbol. All these funds are owned by Grayscale, which is part of Digital Currency Group. We own 616 shares of Grayscale Zcash Trust, ZCSH. And we own 6,582 shares of the Grayscale Litecoin Trust (LTCN). We own 227 coins of Bitcoin Gold. We actually own that directly. That was a fork from the bitcoin we own directly, which is owned in the funds.

Held directly, we have 139.6 actual bitcoin, all of which we mined. We also own directly 7,647 shares of GBTC, the Bitcoin Trust. We own 18 shares of the Ethereum Classic Trust and 40 shares of the Bitcoin Cash Trust, all directly. We also own 283 shares of the Litecoin Trust, as well as 1,763.5 actual Litecoin that we mined. This is in FRMO itself. We own 35 Ethereum that we mined. You can't mine Ethereum anymore because it went to proof-of-stake from proof-of-work. We own 661.7 Ethereum Classic coins, 6.7 Bitcoin Cash coins and 62 Zcash coins that we mined.

Now, we own 30.8% of Winland, as of the last reckoning. I'm going to read to you what Winland owns, and you can multiply by .308 and get the right number. So, this is what Winland owns, because I think it's relevant: 63.3 bitcoin, all of which it mined; 7.4 bitcoin that we didn't mine, we actually bought it; 14.9 Litecoin that we bought or acquired in various ways; 53.5 Zcash that we acquired in various ways, including purchase; 1 Bitcoin Cash coin; 8.7 Bitcoin Gold, from the fork; and 9.4 Ethereum Classic that we actually purchased in the marketplace. Now remember, FRMO owns 30.8% of Winland.

In terms of Texas Pacific Land Trust, which is our biggest investment at the moment, as you all know, we have direct holdings of 7,449 shares. We have indirect holdings, basically in various funds, from Polestar to HK Hard Assets, of 52,224 shares; you can add them and multiply by a price, and see what it's worth. So, those are our investments.

And the point I want to make—and maybe there'll be some questions about crypto—is that there are some seminal events that just happened or are in the process of happening in crypto that I think are very, very positive. I'll mention those and make some comments about Horizon Kinetics, and then we can go to the questions and answers.

You will observe that the Cboe, the Chicago Board Options Exchange, now has a digital asset exchange. It's really important to the future of crypto. There has to be a spot-regulated market for crypto in order for crypto to be an accepted asset class. That's in the process of happening. Obviously, it's going to start small, because it's in test mode, but the regulated exchange, Cboe, already has a digital asset exchange. Before very many months elapse, I personally expect other exchanges to have digital asset exchanges as well. CME already has bitcoin futures.

The Bank for International Settlements, which is a quasi-regulator of banks around the world, some number of weeks ago announced that it is now permissible to have 2% of a bank's balance sheet in crypto. Now, there are some pretty big banks in the world. Can you imagine if 2% of the balance sheet one of the bigger banks were to be invested in crypto? Can you imagine if 2% of a bank were bitcoin and what that would mean for the price of bitcoin? Well, that's in the process of happening.

Now, digital assets mean a lot of different things to a lot of different people. There are already digital assets that need to trade that can trade. I'll give you some examples. A lot of people on this call probably have airline miles and might not even know they have them or have no intention of using them. There's no reason that those can't trade on a regulated exchange, and there's no reason why they can't trade in the form of being paired with the appropriate cryptocurrency, whatever that happens to be.

Then there are loyalty points and coupons—CVS, Walgreens, just as examples, and many retailers have these programs. You might not wish to use them, you may not even know you have them, but on a blockchain, you'd be able to look it up and see. And all of these assets are in the process of being put on blockchains, and they will be paired with various cryptocurrencies. And they will be traded on the exchanges.

Maybe you subscribed to some service online that you never use, and they debit your credit card every month. Maybe somebody wants that service. You can sell that service to somebody else. That's a digital asset. So, there is no shortage of digital assets that have yet to be truly digitized in the cryptocurrency sense of the word. All of that is in process of taking place, so look for or expect really seminal developments in the world of crypto in the not-too-distant future.

Now, you might have observed that in Horizon, we have a little ETF that we started, called the Blockchain Development ETF (BCDF). If you look very closely, you'll see a lot of that ETF is in publicly traded exchanges, and there's a reason for that. We can't introduce cryptocurrency, especially in the digital asset sense that I just referenced, without having regulated exchanges. It's a recipe for disaster. The regulated exchanges had to be properly set up to do these things, and that takes a lot of doing. It's all in the process of happening.

So, I personally predict—it might sound like an outlandish statement, but—the day will come when cryptocurrency is going to be the biggest traded asset. The way I would compare it is, think back half a century to the Chicago Mercantile Exchange. At the time, it was a mere commodities exchange. And as a mere commodity exchange, it traded less commodities than it does right now.

For example, bitcoin is a commodity, and there was no thought of that in the early '70s, fifty years ago.

In any event, currency futures became tradable. If you go back to The Wall Street Journal of 50 years ago and look up the day that currency futures started trading, you could have done a forward swap at a bank because you could always have gone to a bank and exchanged your currency. You didn't technically need a currency future, but we ended up having futures.

If you were to read the op-eds in The Wall Street Journal on the day currency futures started trading in the CME, and you were to cross out the word “currency futures” and write in the word “cryptocurrency,” you could publish that article today. The same things people said then, we're saying now. Yet, look at how much greater the currency futures market is today than commodities. And how much bigger are bond futures than currencies? No one thought of bond futures, although they needed it 50 years ago, and now we have them. Look how big that market is.

I hope I'm right about this because I'm doing this from memory, so forgive me if I misstate it slightly. I don't think I'll be very far off, but I believe that commodities account for about 7% of the revenue of the Chicago Mercantile Exchange. The growth in exchanges would not have been possible without bigger asset classes and new asset classes, and we have them. They were unimaginable 50 years ago.

Still, it's hard to imagine cryptocurrency as an asset class being respected and your typical large institution having a cryptocurrency allocation. In my opinion, it's coming, so I think cryptocurrency has an extremely bright future, and I invite your questions on that. I'll just mention one other thing, which is HK Hard Assets.

Steven Bregman – President & Chief Financial Officer

I’d like to interject a bit of color. You can do it better yourself, but you decided to be efficient with your time, which I think you might need to be with all the questions that have been submitted. But, indeed, at the time that CME was proposing currency futures, it was actually thought by many responsible people, including policymakers, that it would be illegal, and if it wasn’t, that it should be, because they felt it could actually be dangerous for the entire financial system. It could undermine the sovereignty of nations. That was the kind of discussion or rhetoric that was going on at the time.

Murray Stahl – Chairman & Chief Executive Officer

Yes, that was the argument, and just to give you a little bit more color on that point—we have so many questions, so I want to make sure I get to them and deal with all of them—there are many reasons why they thought it would undermine nations, so I'll just give you two.

One, you were buying a future. It could be argued, and it was argued at the time, that you're betting on the future value of a currency relative to another. Today, we don’t even think about that; it’s a standard and prudent hedging practice. Fifty years ago, they said that was gambling. And of course, 50 years ago, gambling was illegal. So, if was gambling really illegal, was hedging your currency exposure illegal?

Today, I think we can state without equivocation that the authorities' intent—although their intent might have been related to gambling—was different than what actually happened. They didn't want to make prudent hedging of currency exposure illegal, but that's what they did. It was impossible to hedge your currency exposure. For companies like we had in the U.S., which were branching out internationally, there was going to be a need—if you thought about it in the forward-looking sense—to hedge their currency exposure. But you couldn't do it without getting yourself arrested. It's amazing, but that's what people said and wrote at the time.

And then, of course—remember, this is the early '70s—the U.S. was not yet off the gold standard. The idea was that no currency should be allowed to float because a nation needs to control the price of its currency. The '70s experience with the inflation, no nation informed us that no nation was ever able to truly control the value of its currency relative to other currencies, and they basically gave up that idea. And incidentally, they gave up pricing their currencies in gold, so currencies no longer had the fixed reference of gold. They basically gave up on fixed currencies.

So that change—put yourself in the position of policymakers in that era—to give up fixed currencies, it's a much bigger sea change than simply allowing cryptocurrencies today. What is being asked for in cryptocurrencies is de minimis relative to what actually happened with futures in the '70s. It was earth shattering at the time.

Anyway, I was going to mention last, before taking the questions, HK Hard Assets. We're building it up. Remember, its purpose is to focus on other investments, not revealing yet what the investments are, and we're approaching the $4 million mark in AUM. Who is in HK Hard Assets? FRMO, me, a company called Horizon Common, which you know, and some other partners in Horizon Kinetics. We started HK Hard Assets with our own capital, and we'll build it to benefit from inflation, and I think that's happening already.

One other item I should have mentioned at the beginning relates to Mesabi Trust, which you might know is one of FRMO's investments. There is an odd fact about Mesabi Trust that I didn't know until a couple days ago. In 1962, the Trust was listed and it was the kind of investment we like, an entity that just collects revenue, and it doesn't really have any employees.

In 1962, to list that on the New York Stock Exchange was considered to be extraordinarily controversial, and I'm reliably informed by people who know about the subject that the SEC had objections to its listing. You could see from their point of view that Mesabi Trust was not really an operating business. Of course, it is a business, the way I look at it, and of course we know that it is listed on the NYSE and has been for more than half a century. And it's no longer controversial.

However, the attorney representing the Mesabi Trust to get it listed, the one who was able to do it, was none other than Lester Tanner, the founder of FRMO, so a bit of irony or serendipitous connection there. It shows you something about the circle of life, how we can touch each other in ways that we don't realize. I didn't know that until a couple of days ago. Anyway, I'll leave you with that thought.

And unless you have something to add, Steve, can we go to questions?

Steven Bregman – President & Chief Financial Officer

By all means.

Murray Stahl – Chairman & Chief Executive Officer

Thérèse, if you could facilitate that, read the questions, and we'll endeavor to give the best answer we can to the subject.

Thérèse Byars – Corporate Secretary

That'll be my pleasure.

Questioner 1

What are the revenues that FRMO received from its ownership interest in HK LLC revenue stream that is valued on the balance sheet at $10.2 million? Is this figure a straight flow through to FRMO's bottom line or is it offset by any costs/taxes? Does this figure vary much?

Murray Stahl – Chairman & Chief Executive Officer

Well, let's do it this way. We're getting—I don't remember the number exactly—a little less than 5% of HK's revenue, so it varies with HK's revenue. And HK's revenue varies in a couple of ways. One is, sometimes we get performance fees, and sometimes we don't. So, revenue varies that way. And, of course, revenue varies with market value fluctuation of the assets we manage, and with the clientele. There's no tax offset or any other deduction, so what you get is what you get. We don't take anything out of it.

Those FRMO revenues are simply an application of the pro rata participation figure to whatever the HK gross revenue is for that quarter. And the fourth quarter, as I said earlier, can be a big quarter with performance fees. This is the fourth quarter for Horizon Kinetics or just past. We have a respectable amount of performance fees, so with the two-month accounting lag, FRMO will have an unusually large revenue figure to report on February 28th, mostly coming from Horizon.

Questioner 1 (continued)

Would it be possible to provide the participation revenues to FRMO for the past few years and/or what is expected in 2023 to 2024? This is obviously a very valuable asset to FRMO, and I would be interested in how Murray and Steve think about its value, as it is essentially a royalty stream.

Murray Stahl – Chairman & Chief Executive Officer

If you want the back numbers, it's easy to get, because you look at our financial statements for the various years, and you would divide our revenue by the proration factor, which I think is something like .0493 or something like that. Anyway, it's somewhere in the annual report, and also the quarterly filings, too You'll see it.

So, if we get $3 million, divide by that number, and that'll give you the Horizon revenue for that time period. That's easy to do. I probably should have memorized the number exactly, but I guess I'm too lazy.

Now, you want me to do a future forecast. Obviously, I can't do that without getting myself in some legal trouble. So, if you don't mind, I'd rather not get myself in legal trouble. And truth said, I can't know exactly what it's going to be. I can just tell you this: if cryptocurrency does well, you'll be very happy with the revenues produced by Horizon.

Questioner 2

What is the difference between the above item—that is, the participation in the revenue stream—and the investment in Horizon Kinetics LLC that sits on the balance sheet at $14.6 million? Is there income to FRMO that flows through from this investment, separate and distinct from the interest in the revenue stream mentioned before? How should one think about the true value within a range of this ownership stake relative to the $14.6 million stated value on the balance sheet?

Murray Stahl – Chairman & Chief Executive Officer

Basically, there are two components to that. The first component is, yes, we own a piece of the profits of Horizon Kinetics. So basically, we get a distribution that's designed to offset, give us enough capital, to pay our taxes. A certain amount of Horizon's profits, other than the tax distribution, is reinvested.

That number on the balance sheet, the $14-odd million, doesn't represent our assessment of the market value. It basically represents the pro-rata share of investments on Horizon's balance sheet. That includes a bit of goodwill, though not a lot of it, and you can decide if that goodwill is merited or not. But it's mostly cash and investments, so, for the most part, it's a hard book.

At some point, we're going to have to monetize Horizon, and then you'll get to see a real market-based trading value, and you'll know for sure. But right now, I think the pro-rata ownership is something like either 4.93% or 4.95%. If you take that FRMO balance sheet figure of, let's call it, $14.5 million to make it easy, and you divide it by .0495, just to approximate, that's $292 million. That would be the Horizon Kinetics balance book value, if you wanted to make that calculation.

HK doesn't have $292 million in cash and hard assets, since there's some goodwill there, but it's got a lot. I'm not disclosing the number we have right now, but as I said, there's not a lot of goodwill there, especially not for an investment management company. In the right market, there'll be some type of monetization event, probably a listing at some point, and you'll get to see what the trading value is. But to answer your question directly, the equity investment in HK is separate and distinct from the revenue share.

Questioner 3

Regarding Winland, my understanding was that one of the strategies was to grow the mining operation significantly. With the current level of distress in crypto mining, is there any reason why Winland has not acquired additional significant mining assets or made strategic investments like the Argo Blockchain Senior Notes, which are currently paying, and were available at four cents on the dollar for less than four months of accrued interest. To quote Hillel the Elder, if not now, when?

Murray Stahl – Chairman & Chief Executive Officer

The answer is very simple, and you can see it quantitatively on what's called the Luxor ASIC Price Index. The prices of the machines are collapsing, so there's no reason to go out and acquire them in the same moment. If the machine prices are not properly discounting the reality of mining economics in respect of the approaching halving, we don't want to buy any.

Recall, the mining equipment was tremendously overvalued; the mere fact that the prices are down from being egregiously overpriced does not mean they are cheap. How overvalued are they? You'll recall that about two and a half years ago, we did a swap with Winland. FRMO bought some brand new equipment, brand new equipment that we in turn immediately sold to Winland in exchange for shares of Winland. I think we got a pretty good deal relative to the price at Winland shares were trading at the time.

If you look at the Luxor ASIC Price Index, that equipment rose in value a lot through November of 2021, and then prices proceeded to collapse. When I say "collapse," and I may be a percent or two off, I would say they lost, from the high point, something in the range of 86%, 88%, or maybe 89% of their value. If today you wanted to buy the machines that we had sold to Winland two and a half years ago, what would you pay? First, you should know that we depreciate them over three years, and it's been over two and a half years, so they're almost fully depreciated machines. Nevertheless, you would pay a price today not dramatically different than what we, FRMO, paid to buy them, more than two and a half years ago. So, no, the current prices still haven't discounted reality, so we just had to stay away.

What we’ve been doing in FRMO is to nibble away, when we thought it was appropriate, at Winland shares. So, we’ve been buying Winland shares, and we thought that was the best use of the capital, given what was going on in the mining rig market. We didn't buy a tremendous number of shares, and Winland itself is not all that liquid. But at the prices we paid for Winland shares, so far, we've made, I would say, a respectable profit.

During the rig price collapse, it just didn't make sense to be very active in this area other than what I just told you. In the future, we'll be getting more constructive, and we're probably going to be interested in buying some equipment at some point. But we’ll probably want to buy new equipment. Buying used equipment is another thing we do, but in this period we really weren't interested in buying equipment that had been used for two-plus years, because it's nearing the end of its useful life. We didn’t know if we'd ultimately break even on it, so we didn't want to do that.

Our next move, if we decide it’s the right move, is to buy some state-of-the-art equipment. It didn’t mention this, but maybe a month or two ago, we did buy some brand-new state-of-the-art equipment in Consensus Mining, which is now functioning. Remember, when you buy equipment, you always have to be cognizant of the approaching halving, so at this stage, we're going to have to buy some new equipment that can generate a positive return at the lower economics.

Questioner 4

What are management’s thoughts on oil royalty businesses making acquisitions right now at the expense of shareholder dilution? For example, as is the case for Sitio Royalties acquiring Brigham Minerals?

Murray Stahl – Chairman & Chief Executive Officer

Well, that's a very elegantly phrased question. Thank you so much for phrasing it that way. Basically, I don't agree that it makes sense to acquire royalty interests for equity like was done in a transaction that you described. I'll explain why.

No matter how good the royalty is, the royalty is finite. Every oil royalty has a decline curve. Sooner or later, it'll produce no oil, even if it's a great resource and lasts a long period of time. The equity is forever, it’s a perpetuity. Generally speaking, that's one reason to avoid paying for a royalty stream with equity.

This is generalizable to acquisitions in a lot of businesses. You buy a business, whatever it is. In this case, it's oil royalties, but it could be a technology business, or a manufacturer. It could even be pharmaceuticals. Let's use the example of pharmaceuticals. A challenge, or the beauty, depending how you look at it, of the pharmaceutical industry is that however brilliant a certain drug or portfolio of drugs is, the pace of human knowledge and human progress continue.

So, if you buy a pharmaceutical company with equity, you face one of two essential outcomes. Either A), its drugs are going to go off patent and you'll eventually get a lot less revenue, or B) which is more likely, in the fullness of time, some other company will develop a superior treatment to what you've bought. When you offer stock for someone else's business, the business you buy is going to have a finite life. The stock you were offering in exchange for that has an infinite life. That's the problem with using equity in acquisitions.

In the '70s, using equity currency to acquire other businesses was very popular, and textbooks were written about it. Case studies were written at major universities about using equity to buy a diverse variety of businesses. The idea was, if you think about it, very similar to what we now call modern portfolio theory. Every business has its own cyclicality, so if you were clever about it, you'd buy a bunch of businesses where the cyclicality of one will offset the cyclicality of the other, and you'd be able to develop a stable consolidated revenue and earnings stream.

But the problem is that every business is like a human being. It has a finite life, while the equity has an infinite life, which ultimately makes it not a sensible strategy, and I don't think very highly of it. It's one of the reasons why we don't use equity very much to buy things at FRMO.

Questioner 5

Being on the board of directors and a large shareholder of TPL, would management be able to speak on why Texas Pacific Land Corporation does not publish any kind of "proved, probable, and possible reserve" analysis in their annual reports as other royalty businesses like Brigham, Black Stone Minerals, and Viper Energy do? The TPL 10-K does not exactly make clear why these figures are "unavailable." In March 2022, a Bloomberg article noted that "the Permian basin is uniquely positioned to become the world's most important growth engine for oil production." So, it seems like making the data public on TPL's reserve could be beneficial for shareholder returns unless it wouldn't, in which case, shareholders should know about this as well.

Murray Stahl – Chairman & Chief Executive Officer

All I can say in answer, given my position on the Board, is that though I normally like to answer every question, I'm just not at liberty to answer that question in the manner that it's phrased. So unfortunately, I'm going to have to decline to answer.

Questioner 6

Could management give us an update on FRMO's MIAX investment, now that Miami International Holdings has filed for an IPO? What is the outlook for MIAX's asset classes? How does management think it will gain market share? For example, SPIKES futures appear to trade in a similar manner to VIX, but with the added friction of lower liquidity. Why would traders want to switch to trading with this new instrument? Does MIAX have any pricing power versus other exchanges?

Murray Stahl – Chairman & Chief Executive Officer

Let's put it this way. The best way to judge MIAX is just to go on the website and look at the volume. For all exchanges, the profitability is really a function of volume. More volume raises the expenses a little bit, but not a lot. In a really bad market, the volume contracts, and there's very little en exchange can do to cut expenses, because it's already so efficient, the margins are just so high. In MIAX's case, even in the past year's pretty rotten market, its volumes actually didn't contract.

What I can tell you is that in the world of securities exchanges, we're going to create completely new and just amazing—and I think that's the right way to phrase it—sets of assets. I'm personally prejudiced, so this is not entirely objective, but I think MIAX has the best technology.

In any event, this is just an example. It's not because of anything MIAX is going to do. I want to give you an example of how exchanges in the future are going to be different and why I like them so much, and MIAX in particular. An investment manager will say, "I think the GDP is going to go up or down by a certain amount, and therefore I will go long or short the S&P 500 in a certain quantity." The trouble with that S&P trade, as logical as it might be, and even though the premise upon which it's based might be spot-on accurate, is that it is a very idiosyncratic trade.

Because the economy might go up or down precisely as forecasted, but other things happen that can and do impact the S&P 500 also. The values of currencies rise and fall. Interest rates wax and wane. Corporate profit margins expand and contract, so you can't simply generalize that a GDP change of X will lead to an S&P return of some properly commensurate amount, either positive or negative.

In the financial instruments world of the future, you will be able to be much more specific as to the primary factor or variable you're interested in. You'll be able to say, "I think the GDP of the U.S. is going to rise by 3%." And you'll be able to buy a future or some other type of instrument that will pay you if the GDP does in point of fact rise by 3%. And if the GDP rises by less than 3% or it actually becomes negative, then you're going to pay someone else. And, even before you do that trade, you will know exactly how much you will make or lose if the GDP performs in a certain manner. That's going to be possible in a blockchain cryptocurrency environment. You're going to be able to do things that you really can't do today.

There are only a handful of big exchanges with futures and clearing licenses. I mentioned only a tiny subset of the types of products that are possible. There are more products conceivable than all the exchanges, with all their technology put together, can handle at the moment. It's going to be just an incredible experience.

As far as the MIAX IPO, it's no secret that the IPO market is just, at least until a week or two ago, the worst in a very long time. In 2020, I think hardly any companies came public, since it was just a horrible environment to do so. It's much more logical to come public in a better environment, which we'll eventually have in due course. We just need to be patient. I don't know when MIAX will conduct its IPO, obviously, but it'll happen in due course, and then we'll see what the value is. I'm very, very optimistic about the future of MIAX.

Questioner 7

Could you please talk about the prospects for FRMO's smaller investments like Digital Currency Group, Winland Holdings, Miami International Holdings, and HM Tech?

Murray Stahl – Chairman & Chief Executive Officer

I already addressed **MIAX**, but to summarize, I like exchanges in general and MIAX in particular. I think the future is bright and your best indicator of how the businesses are doing, just go to their websites and look at the progression of the daily volume. It's all publicly available, even for the private exchanges. You'll know, more or less, what's happening by looking at the volume, which is growing, and that has yet to reflect all of the future possibilities from entirely new and superior types of contracts, so a very bright future.

Winland is evolving into a cryptocurrency mining company. It was not prudent in the last 12 months to buy any more mining equipment. But, at this point, it's probably going to be prudent to buy some mining equipment, so you'll see more investment along those lines. What exactly are we going to do and exactly how we're going to do it, I can't say. I don't actually know at the moment how we're going to go about it, but I think we're coming to a much better period for cryptocurrency, so look for more investments there.

Anyway, Winland has prospered. One of Winland's investments is now in the process of being realized. You might recall that some years ago Winland invested in Mount Gox, which had previously gone bankrupt. There were bankruptcy claims and trade claims for the crypto there, and the bankruptcy is now concluding. We're now going to monetize the trade claims. We expect to put that cash to good use.

Meanwhile, Winland continues to mine and to build its cryptocurrency balances. One thing I should say about Winland is that it can be thought of almost like a quasi-bitcoin ETF. When you buy a bitcoin ETF, if there were a bitcoin ETF, you should be aware of the fee impact. Unlike a mutual fund or an ordinary ETF, bitcoin pays no dividends that can be used to pay the operator's fees. Therefore, if there were a bitcoin ETF, the operator, each and every quarter or probably every month, would have to sell some bitcoin to pay the fees.

Let's just take the abstraction, to simplify the example, that no one puts money in or takes money out of the ETF. There's a certain initial number of coins in the fund, and every year, the number coins is going to diminish. For Winland, as you can see, and a reason we read these statements, the number of coins increases every quarter, because we mine it. So, which would you rather have? Would you rather have a cryptocurrency ETF in which the coin balance diminishes or would you rather have an investment where the coins increase?

I believe the day will come when there are bitcoin ETFs, and there are investors who are going to understand the distinction between the two classes. There are people who will decide to go long the mining companies like Winland, and go short the cryptocurrency ETFs, to lock in a certain return based on how fast a Winland, say, can grow the bitcoin balance through mining.

HM Tech is actually doing very well. HM Tech is organized in such a way that the variability of the different businesses offset one another. For example, this past year many hosting companies experienced business issues that became problematic. We, ourselves, had equipment with hosting companies that were having difficulties, but we had the strategic ability to send our equipment to HM Tech.

We have, at HM Tech, greater liberty of action, in how we go about mining and how we go about buying electric power. When you run your mining machinery at another mining or hosting company, you have to buy electric power on their terms, effectively through them. But, because we control HM Tech, we can buy electric power on our terms, so that's a pretty good thing to have.

The repair business was doing less well during the calamity of the mining equipment price crash. On the other hand, the movement of our equipment to HM Tech was a positive, so you could say in that sense the business overall is in equilibrium. Actually, we expanded HM Tech during the year. We bought a transformer, which gave us the ability to draw more power. Now you know the reason why we wanted to draw more power, and that worked out rather well, I think. As it happened, during the months when the electric utility was installing the transformer, the crypto market was going through its carnage, so we weren't any of the worst for wear, and now HM Tech is operating pretty much at capacity.

The building itself, which is owned by FRMO, I'm reliably informed, could be sold—not that we're going to—for twice what we paid for it, so it's nice to know that. So, HM Tech is a nice little asset doing very well.

Digital Currency Group, as you've seen, have their challenges, obviously, but the core business is fabulous. What's the core business? It's a bitcoin investment trust. You know what the assets under management are, you can find that on the website in a second. You know what the fees are, and much of that goes right to the bottom line. So there are challenges in other aspects of the DGC business, as you can read in the journals, but we never got involved in lending out crypto or any of that stuff. We don't really believe much in it.

In the future, I don't think you're going to see that sort of activity in general in the cryptocurrency world—that’s really something that's best done in banking. But I think the core business of Digital Currency Group is great. If bitcoin or the other cryptos rise in value, which I suspect they will, it's going to be better, so the core remains, and I think, fairly robust.

Questioner 8

This is a follow up on Questioner 7 from the Fiscal Year 2021 Second Quarter Earnings Call.

Instead of reviewing it only verbally on the conference call, can you also please begin to list exactly what the exposures are of the major assets that everyone wants to know about? A small table that shows the number of look-through shares of TPL, bitcoin, mining equipment, Winland shares, etc. would be very helpful. If that is not possible for some reason, then my question is, what specifically prevents you from doing this? Choice, specific regulations?

Murray Stahl – Chairman & Chief Executive Officer

Nothing prevents me from doing it, since I just read it aloud, and I read it off a table, so I don't see any reason why we can't put the table somewhere. Could you do that, Thérèse? Could you arrange to have the table put either on the website or some place appropriate so that everyone can see it? I don't think there's a regulatory reason why they can't see it.

Thérèse Byars – Corporate Secretary

Yes. I will do that. I will work with Jay on that.

Murray Stahl – Chairman & Chief Executive Officer

Okay, so you'll take care of it, so we'll take care of that, and hopefully it'll be up there in due course and everybody can see it.

Questioner 9

Why are there no first quarter or third quarter transcripts for the year 2021 and no first quarter transcript for the fiscal year 2022? That actually was just put out. On the FRMO website, they appear to have been skipped over.

Steven Bregman – President & Chief Financial Officer

I think I should answer that question.

That falls on my broad shoulders. First of all, I'll simply say, my fault. I should have done it. And as happened with this particular cycle, I had that document in front of me on my computer screen for quite some weeks. Other things kept coming up, and I never quite got to it. That's been a bit of a pattern, and it's not a pattern that should be repeated.

One of the deficits we've had operationally is we haven't really had the kind of professional editorial and editing function or layer, at Horizon Kinetics, for the various kinds of public-facing documents and content production that come up. I've been on the lookout for qualified people to do that for quite a long time, and I've experimented over time with people with different qualifications.

It just so happens that a contributing reason why this latest transcript was actually posted to our website is that in recent weeks, and I mean only in the last two or three weeks, I've begun to work with somebody who I think fits the bill. He's an extremely qualified, very seasoned professional author and journalist, particularly a financial journalist. He's freed me up to take a look at this kind of thing. We've so far been playing around with who takes which assignment.

It's early yet, but if he or someone like him works out over time, I think we'd actually establish a department and proper style book, and things will work more smoothly. So the next order of business, on this small end of things, is to catch up with the prior couple of transcripts.

Murray Stahl – Chairman & Chief Executive Officer

Okay, thanks, Steve. I'm sure we'll get it up in due course.

Questioner 10

Management has mentioned that they, apart from Jay Kesslen and Thérèse Byars, are made up of three new directors. Are they only employees of FRMO, and that management takes no compensation? Could management explain what the costs are in the operating expenses of the income statements as well as what determines the fluctuations in FRMO's operating expenses? Operating expenses were broken down into more detailed lines in annual reports, for example, "Employee compensation and benefits," until 2019, when they began to be rolled into a single SG&A expense line, so it is no longer as clear.

Murray Stahl – Chairman & Chief Executive Officer

Okay, maybe we should reveal it. So, Steve and I, we're not taking any money. We're not getting paid, because we own the stock, and if it goes up, we'll make money on that. The expenses primarily are the professional fees of the audit, the accounting, that line of country. That really comprises the expenses. There are some fees associated with OTC Markets. There are some minor expenses, to the degree that we buy electricity for cryptocurrency. That's the primary stuff.

The directors don't get cash compensation. We give them some options to buy FRMO stock, and sometimes, when the stock goes up, they exercise them, and sometimes the stock doesn't go up, and they expire unexercised. That's what directors get paid. They don’t get cash compensation.

Occasionally, we have a legal bill, nothing big. If there's a question we need to research, about whether we can we do X or should we not do X, then we go to an outside law firm, and that's an expense. It doesn't always happen every quarter, so that's a source of variability. Those are basically the expenses. I don't think I'm missing anything important. If you need to break it down, I'm sure we can obtain that for you.

Questioner 11

Charlie Munger recently celebrated his 99^{th} birthday this January. Unlike Warren Buffett's permanent capital vehicle, Berkshire, FRMO has not explicated plans for any type of succession. While I'm sure all FRMO shareholders and Horizon clients would wish for current management to remain at the helm of capital allocation for as long as possible, and I recall that in past meetings, management has stated they have no intent on retiring, could management detail what they see as the most likely outcome for FRMO shareholders once Mr. Stahl and Mr. Bregman are no longer running the show? Any succession plans regarding FRMO management?

Murray Stahl – Chairman & Chief Executive Officer

Let's just say this. There are people who could probably do it. I've talked to a variety of people who are not FRMO employees right now, who I'm sure would be interested in doing it. It would be someone or some persons who are currently active in the investment management realm and, obviously, are going to be younger than us. We want them to be active in the investment management realm.

Why don't we want to make them employees of Horizon? Because we want to see what they would do unconstrained by us. If they're our employees, whether we give them total freedom or not, they're going to be operating under our constraints even if only implicitly. We won't know, therefore, know how they would really operate on their own. They've got to be running their own show. So, maybe a way to do it is, they're someone already running their own show, doing whatever they're doing. Maybe, when the time comes, we would merge FRMO with whatever their enterprise is, and now they're going to run the show. And they'd be unconstrained by us, other than the fact that we respect what they're doing, but they're different people, and maybe that's the way it should be. So that's the way I see it happening.

I have people in mind, but they have to be at least 20 years younger than us, maybe more if we can achieve that. But on the other hand, we're not going to let any 25 year-old person do it, because, number one, they're not seasoned. And number two, we wouldn't have the experience of seeing them operate in the variety of unpleasant investment environments that happen from time to time. Anybody we'd even consider would have to be someone who has, so to speak, their battle scars, somebody who's been in the business for at least 20 years. That's basically the plan.

Questioner 12

In the previous earnings call, management mentioned that Horizon Kinetics was continually buying shares of FRMO. Could management give some detail on the valuation model that they used to look at FRMO to decide when to buy back shares?

Murray Stahl – Chairman & Chief Executive Officer

Let's put it this way. Other than restricted periods, we're always buying back shares. We filed one of these programs that allows us to buy back shares every day, so we don't have a model that will dictate that buy back shares in month one, but then the stock goes up, and we're not going to buy back shares in month two. We're constantly repurchasing shares. I personally buy a small number of shares to supplement what Horizon does. Right now, it's on the restricted list, so I can't buy it. I think a day or two after this phone call, it comes off the restricted list, and I assure you I will commence buying.

And we don't really need a model. The reason is because FRMO is a company with a lot of optionality. It's very hard to construct a model to embrace that. Take any one of the variables. I spoke a lot about cryptocurrency today, so I'll use it. We have a number of vehicles via which we engage in cryptocurrency, and we do a lot of different things with them. We're in the process of growing them. If cryptocurrency were to become the biggest of the asset classes, which I personally think will be the outcome, you'll be very happy with the price of FRMO.

In the interim, because obviously that's not happening today, we've been growing the cryptocurrency assets and the cryptocurrency businesses every so gradually. It didn't make sense to jump in with both feet, so to speak, for the reason I mentioned earlier: there was a real valuation problem. Or rather, there was more than just a valuation problem; there was tremendous volume of money raised to invest in mining relative to what could be absorbed in a brief period of time. It was raised and invested without reckoning the economic basics of cryptocurrency—you just have to know, if you're in the mining business, assuming the cryptocurrency price remains the same, which has to be your basic assumption—that 50% of the revenue is going away every four years.

In point of fact, in the fullness of time, the cryptocurrency is going to rise, but your equipment is going to become obsolete. So, you shouldn't expect a much longer life than three years. For us, it turns out that, because we have the repair business, we've been able to use certain machinery for longer than three years. We've been able to pull it off, but we have no right to expect that. It just so happened, but it's still not going to last for much longer than three years. Maybe it will last four or even last four and a half years, but ultimately, it becomes less profitable because it's less efficient, and then it really does reach the end of its useful life.

None of that economic reality was reflected in the cryptocurrency environment. Therefore, we had to stay away from investing for a time, as much as we are interested in cryptocurrency. I think we're one of the few companies, if I can promote myself for just a moment—I shouldn't do it, but I will, and the figures are available to anybody who's curious to look at them— that we were able to navigate a brutal, what they call, a cryptocurrency winter. We were able to navigate that. Nobody else seemed to be able to do that, so I'm actually very proud of that. I didn't enjoy the crypto winter, but we were prepared for a crypto winter. And I think that's personally worth a lot. Anyway, I'm buying FRMO, so take it for whatever it's worth.

Questioner 13

Do the cofounders of FRMO own basically the same percent of ownership of Horizon Kinetics LLC? Even though Horizon Kinetics is private, both companies share management and make similar investments.

Murray Stahl – Chairman & Chief Executive Officer

Yes, the answer is, it's not identical, for a whole host of reasons, but it's similar. If you were to see the ownership list of Horizon, it's not radically different than the ownership list of FRMO. As I said, there are a lot of reasons. One is that I've never sold a share of FRMO; I've only bought, so my ownership has gone up a bit. Horizon is a private company; we've never bought or sold shares. We've done some other types of transactions that have altered the ownership structure a little, but not radically, so you would recognize the basic shape of the ownership structure if you were to see the shareholder list of Horizon Kinetics.

Questioner 14

When do you think you'll be able to raise the FRMO listing to the NASDAQ?

Murray Stahl – Chairman & Chief Executive Officer

All I can say is, mea culpa. It's totally on me. I keep saying I'm going to do it, and then I just don't have time to do it. I'd like to, and as you can see, I'm involved in a lot of stuff. I'm doing meetings like this and I'm involved in all sorts of issues that you can read about. I write a lot of research reports. But I can only do so much. It is a priority with me, though, so I'm going to do it at some point. And you won't be disappointed.

Questioner 15

Yahoo! Finance reported on November 25, 2022 that in a note to their shareholders, Digital Currency Group founder Barry Silbert attempted to calm investor nerves about the financial health of Digital Currency Group's subsidiaries, including Grayscale Investments. My question is, does management have any concerns about the solvency of the Grayscale cryptocurrency funds that FRMO owns? Do you have any concerns over the solvency of Digital Currency Group?

Murray Stahl – Chairman & Chief Executive Officer

Well, with Grayscale, no concerns whatsoever, because they're just funds that own a certain amount of cryptocurrency. In the case of the Bitcoin Trust, it just owns bitcoin. It's custodied securely. It's segregated. I have no concerns whatsoever.

In the case of Digital Currency Group, there is some debt, but the debt isn't owed, I think, for something like ten years. This information is in the public realm. There were articles about it. If you were take the fee on the Bitcoin Trust and multiply by the AUM, you could calculate what the revenue is. I don't think there's any problem there, at least none that I can see. So, I'm not really worried about it.

In any event, on a cost basis, we don't have a lot of money in Digital Currency Group. The issue is, what it's worth right now, and there you can get a lot of different numbers. Naturally, we want it to be worth as much as possible. I think the current issues, being as controversial as they are, are not going away tomorrow, but I believe they are, in principle solvable. The company will just have to work through them and solve them.

And it's not just Digital Currency Group. It's every company in crypto, with the exception of us. That's why I promoted myself shamelessly, which I almost never do, a little while ago. Lots of companies threw a lot of capital at something that they ought not to have thrown a lot of capital at, and we had a completely different strategy. They created a lot of problems for people, and they're not the kind of problems that you can master in a week or a month, and there are quite a few of them. They just have to work through them, I guess.

We had a completely different methodology and we don't have any issues like that. That's the flip side of when people want you to be aggressive. I really shouldn't blame people, because what they did, in a way, made a lot of sense. Let me just go into a bit of detail as to why it made sense to them. There were two reasons.

The first reason has to do with the basic premise of crypto. I should preface that this is not my strategy, you know what my strategy is; I'm just arguing rhetorically for accepted popular approach was, to clarify why it made sense to those participants at the time.

For those who believe that crypto is going to outperform the dollar, which I believe too, then it seems like the next logical step should be, well, why don't you borrow money in dollars to buy your crypto mining equipment, and you'll eventually pay back in appreciated currency, relative to your dollars, via your crypto investments? It makes so much sense, right? Except, it's problematic to do the accounting that way. I understand that's the GAAP accounting, and that's what's required, but just because that's required doesn't mean you have to think that way. You can think any way you want.

Let's just go through and compare and contrast with the way we look at things. When you buy a cryptocurrency mining machine, it may not be apparent to you, but you don't pay dollars for it. It's priced in dollars, but the manufacturers don't want dollars. They want crypto. So, when buying equipment, the relevant question, because you're paying for it with a finite amount of cryptocurrency, is whether, over the operative life of the machines, you're going to get more crypto than you paid out? If the answer is yes, which it might not be, how much more do you expect? For example, if you paid 100 bitcoin for a group of machines, then to make it a sensible investment, you're going to have to get, over the life of the machines, at least 160, maybe 175 or 180 bitcoin back. If you can't see that happening, you ought not to invest in the machines.

That's why I refer, over and over, to the halving. The halving date is known in advance; you know how many days you have. Using 180 coins as an example—if you can't see earning 180 crypto over the life of the machine that you paid 100 crypto for, you have to cease investing.

The performance of the dollar in relation to bitcoin or bitcoin in relation to the dollar is irrelevant, because you're raising, you'll owe dollars, but you're not paying for the equipment in dollars. That's the mistake everybody made. Moreover, they thought why use equity when you can use debt? Now, we don't like to pay with equity, for the reasons I mentioned earlier, because it's a perpetuity. We don't want to use that. And as to debt, we don't use that either—we're trying to create all our capital internally, or at least most of it internally, which is another thing people don't want to do. The public company approach to expansion in crypto mining further complexified the problem. If you're bringing in investors with their capital, and that's denominated in dollars, then you're implicitly trying to figure out, what will the price of bitcoin in relation to the U.S. dollar be at any point in time?

Remember that debt is due on a certain fixed date. That's why they call it fixed income. So even if bitcoin outperforms the dollar in the fullness of time, how do you know bitcoin is going to outperform during the life of the fixed income liability that you've assumed? You don't really know that, do you? Therefore, it makes more sense to operate entirely in crypto.

My second reason the crypto mining companies got in trouble is by ignoring the whole point, the purpose of crypto. The whole purpose of crypto is to be outside of the dollar/fiat currency system. If you want to be outside of the that system and calculate everything in your business operations in bitcoin, then why would you reenter the dollar system to fund investments and be subject to the mutability of the dollar, even though you think in the long run bitcoin will do better than the dollar? I don't want that.

So, now you see the difference between their strategy and ours. But, you also would further see, if you forget about our strategy for a second, how reasonable all those strategies seemed to the majority of participants. I'm not criticizing them. I'm saying that those strategies, expostulated the way I just did, seem entirely reasonable, even defensible. But they're embracing a risk that I have no intention of ever undertaking. I won't do it, and I didn't do it.

You can see why the majority of operators felt otherwise, because they treated the currency of bitcoin as a pure financial vehicle as if it were the euro or the yen or some other type of currency. But it's not, because whether you undertake an investment in Europe or Asia or somewhere else—and you can make reasonable assertions about how other currencies will operate—they're all fiat currencies.

Bitcoin is not a fiat currency. It operates in accordance with certain strictly defined rules that include finite time periods. In a finite time period, you don't really know what's going to happen to crypto pricing, especially if participants aren't cognizant of the operating economics impact of the approaching halving, which they weren't. But I'm sympathetic to what people did. I don't agree with it, but their general thought process seemed entirely reasonable.

Just because something is reasonable doesn't mean it's right. It's reasonable. It's defensible. It was just the wrong thing to do, and we didn't do it. But that's what makes the market. We do things differently, but I'll never criticize what happened on grounds of un-reasonability. It was reasonable. So, all companies did that, and I think they've learned their lesson. It's just going to take varying amounts of time to work through those problems.

Questioner 16

What does management make of how the FTX contagion is affecting Digital Currency Group and its subsidiaries Genesis and Grayscale, given that FRMO and Horizon Kinetics funds' main bitcoin exposure comes from GBTC?

Murray Stahl – Chairman & Chief Executive Officer

FTX is not impacting it. FTX is very simple. FTX is just embezzlement. There's a certain amount of money in FTX. Whether it's currency or fiat is irrelevant. It was just purloined, it’s that simple.

The problem that you're referring to is, what is the discount to net asset value of the Bitcoin Trust? There are some who believe that the liability at Digital Currency Group could theoretically be accelerated and they'll have to pay for that with assets; their biggest asset is the shares they own in Bitcoin Trust, which in theory, they could be forced to hand over. I don't believe it's likely, but if you want to paint the gruesome scenario that some people paint, in relation to FTX, there's liability, here's how it would go, since the liability has to be paid.

If it will be a matter of handing over shares of the Bitcoin Trust, which of course, the creditors who receive it won’t want, they'll just dump those shares on the market. There won't be enough buyers for it, and for that reason the GBTC shares will trade at a big discount to net asset value. That's basically the scenario.

Personally, at the discount to net asset value at which the Bitcoin Trust, GBTC, trades right now it’s a great buy. Just so you know, I personally bought some today, I really did. I'm not going crazy and buying tremendous amounts of it, but I bought some. I don't know how long the discount to NAV is going to last. Chances are, it's not going away in a day or two, but eventually there will be bitcoin ETFs. Eventually, this Trust is going to be a Bitcoin ETF, and it's going to trade at NAV, plus I believe the bitcoin price is going to be higher.

Of course I could be wrong, so don't go by what I say, but even if the price of bitcoin remains flat, unchanged, and you're buying the Bitcoin Trust at roughly half of net asset value, then if and when it does trade at net asset value, you're doubling your money. It's a 100% rate of return. Now, if bitcoin rises X percent, and it trades at that net asset value, you can see how robust that return could be. I personally think it's a really great investment. Anyway, we have lots of shares of it, and I wouldn't mind having more.

Questioner 17

The next question is related. Does management have any thoughts on the FTX crash and how this may affect bitcoin and institutional adoption of bitcoin as a monetary asset going forward? This crash appears to be unique from other previous bitcoin cryptocurrency-related crashes, for example, Mount Gox, in that this most recent crash has affected a large number of institutional investors who had stuck their necks out for cryptocurrency. Is this a correct reading of history? Does management, with their unique position in running an asset management business themselves, see any growing "once bitten, forever shy" sentiment among institutional investors regarding cryptocurrency or bitcoin in particular?

Murray Stahl – Chairman & Chief Executive Officer

There are many things I can say about that. Let's just start with this. This was embezzlement. This was fraud. So, in its own way, though the fact pattern is a little different, it's not that dissimilar from Enron. It's not that dissimilar from the Madoff scandal.

Did the Madoff scandal stop people from hiring outside investment advisors? The Enron scandal, did that stop people from buying publicly traded securities? At the time, it was traumatic. But it's basically nothing more than the pledging and looting of client assets. Had FTX not been a crypto company, had it been a ordinary financial advisor, you would have had the exact same outcome in dollars.

The fact that it happened to be a crypto broker had absolutely nothing to do with the ultimate collapse. If FTX were a money market fund, and they were doing nothing other than buying U.S. Treasuries, well, if they steal all the money, then you're not going to get any. It's really that simple.

By the way, FTX had a very high ESG rating. I think it had the highest rating you can get. That's one of the problems with the way ESG ratings are determined. I have no idea as to what degree FTX complied or did not comply with ESG standards, and I have no idea how these ratings are compiled, but it had a high ESG rating. But this does give an insight into the way institutions make investment decisions. You could see why an institution would say, "FTX has a high ESG rating, it must be okay." And obviously, that was not true. So, having a high ESG rating is not the same thing as having probity. And what that lacked is probity.

So, I don't think FTX is in any way going to lessen or diminish or delay the growth of cryptocurrency as an asset class, because it has absolutely nothing to do with cryptocurrency. That's not made clear in newspaper articles, probably because the people who write them don't realize what actually happened. But basically, it's a case of embezzlement.

If you wish to verify what I said, the bankruptcy trustee that was appointed to liquidate FTX testified before the U.S. Congress, and that testimony is in the public domain. You can read it. Everything I just told you, that's where it comes from, so it's testimony under oath. It would be really great if the articles referencing this subject could include the appropriate testimony from the bankruptcy trustee, but they don't. So maybe at some point someone will write about that subject.

Anyway, that's where we are. I don't think this is a setback for cryptocurrency, because it has nothing to do with cryptocurrency. It just so happened this person was involved in cryptocurrency, but there are people who steal dollars, they do it all the time, and no one says, "I'm going to stop using the U.S. dollar because someone stole all the money in a company that had nothing but dollars in it." As far as the progress that's being made in crypto, you can see it for yourself if you follow what's happening on the Chicago Board of Options Exchange, and you'll be seeing other product and regulatory develepments in due course at other publicly traded exchanges.

Questioner 18

In a 2021 interview, Murray Stahl gave a podcast called "In the Area." One of the topics covered was the disintermediating effects that bitcoin and openly discoverable blockchain transactions would have on society in the context of inverting the many-to-one, individual-to-Google-to-advertising relationship into a one-to-many, individual-to-advertisers relationship, wherein advertisers directly pay individuals for the right to advertise to them based on their transaction history.

Is management currently investing in or looking at companies that would be along the path toward facilitating this kind of shifting advertising dynamic? For example, though not at all a recommendation, there is the open source Brave web browser's Basic Attention Token, which seeks to build out a distributed micro/nano payments ledger of crypto tokens minted on proof-of-user attention given to it as advertising.

Murray Stahl – Chairman & Chief Executive Officer

Yes, I looked at that. I haven't bought that yet. I'm not sure that's the right way to achieve it. There are many, many different approaches to the subject. I'm confident someone, or many people, will come up with a successful approach or approaches.

My own view is that the way it's going to start is with assets that people have, but which they might not even know they have. For example, some individual has a subscription, maybe a software subscription or to an online magazine. Whatever it might be, they're not even aware that they're paying $20 a year on their credit card. They don't even look. I believe some firm is going to start mining that data, put it on a blockchain so everyone can look it up, and they're going to become cognizant that they have those assets.

A similar thing is going to happen to other digital assets. It's going to start with digital assets and then those digital assets are going to be monetized. Whoever accomplishes that is going to have a great advantage, because you've now caught the attention of very large numbers, tens of millions of people. After that, it becomes relatively easier—not easy, but easier—to persuade those individuals to entrust their data to the blockchain. And then there'll be a database of data, and it won't be gathered by the leading technology companies; instead, it will just be gathered by the individual consumers through this mechanism. If they feel like monetizing their data, though some people may not want to do, they'll be able to. And it can start with something as simple as, do you wish to see an advertisement on a certain subject?

I believe that's how it's going to evolve. In my travels, what I've seen the most software development on—that's within striking distance of realization—is the mining of data and the possible monetization of digital assets, anything relating to digital assets and its monetization. That's what I think is going to be the first success. And we'll have to go from there.

Steven Bregman – President & Chief Financial Officer

Murray, I thought to go back to a prior question. It was about the once bitten, twice shy sentiment that might be feared among institutional investors regarding bitcoin. I understand the reason for the question, but in point of fact, you can measure institutional acceptance. You've explicated a number of different factors over time that describe various facets of the cryptocurrency industry and its robustness or lack of robustness. There are all sorts of markers that measure bitcoin usage, for instance, such as the number of active wallets or the concentration profile of coin holders or the number of Lightning Network channels, the number of system nodes and servers.

You can look at institutional changes, whether they're private institutions like Fidelity or banks that are building robust custody and exchange and pricing systems and platforms, which institutions don't undertake lightly. Then there are central banks, too. You could make a list or a table—actually, I suggested this to somebody, one of our analysts, yesterday—of all these various factors, say a dozen, and track them over time. Call it an index, basically, of acceptance. As you suggested very early on, cryptocurrency is a money, and money is about acceptance, and those factors are just measures of how broad and deep acceptance is continuing.

Murray Stahl – Chairman & Chief Executive Officer

Well, true, it's definitely true. It'll be addressed in due course, so if you want something, just the quick and dirty of the discount to NAV of the Grayscale Bitcoin Trust, it's a measure of sentiment, in a way. If you want something very easy to do, that's the thing to do. And if you want something a little bit more difficult, but not much more difficult, to give you a better sense, I would say take the single asset digital currency products—like Litecoin Trust, the Ethereum Classic Trust and Zcash Trust—and look at their discounts to NAV. I think you'll get a pretty good indication of what the sentiment is.

But we're on the verge of just tremendous developments in crypto, so I think the industry quite properly is saying, 'I need to be shown success,' and they're right. They want to see the success. Most people do. Incidentally, you don't need the whole world to be invested in bitcoin for this to be incredibly successful.

Don't forget, the history of the New York Stock Exchange. Democratization, meaning the average person started owning stock, didn't happen until the advent of IRA accounts in the 1980s and beyond that. The NYSE was founded, I think, in 1797 or thereabouts. So, it took almost two centuries to get democratization. In New York, people made a lot of money in the New York Stock Exchange without a lot of stock being owned by the average person. You don't need to have everyone involved. That's the point I'm trying to make.

So, crypto is going to be successful with or without the participation of the vast investment public. It'd be nice to have them, but we don't need them. It's in the process of happening even without them. Another example: does the average person own bond futures? I think not. And look how big the bond futures market is. Does the average person trade in currency futures? I think not. Look how big the currency market is. Does the average person trade in oil futures? Look how big that market is.

And by the way, the derivatives market—I don't want to compare bitcoin to derivatives because it's not the right analogy, but the derivatives market—is bigger than the bond futures market. The derivatives market is hundreds of trillions of dollars. Does the average person trade derivatives? No, they do not. Look how big that market is. So, I don't think that the necessary precondition of success is broad public adoption. It's nice to have it. Eventually, I think we'll get it, but I'm not waiting for it personally, and I don't think I need it.

Questioner 19

The last question is also related. Are you looking at FTX claims? Do you believe they will have an outcome similar to Mount Gox claims?

Murray Stahl – Chairman & Chief Executive Officer

Am I looking at FTX claims? The answer is no and I'll tell you exactly what my reasoning is. For Mount Gox, there was a hack. Some portion of the bitcoin was stolen, and we knew what the figure was. It wasn't every account that was broken into. Most accounts weren't touched, some accounts had no bitcoin in them, and some accounts lost some of their bitcoin.

Because most accounts lost no bitcoin, instead of letting just some accounts suffer the loss, what the management of Mount Gox decided to do in Japan was to socialize the losses—meaning that everyone had the identical outcome in terms of the loss. That's the way it worked there. The point is that we knew what we were dealing with. We knew the socialized losses, we knew what the losses were. There were going to be some bankruptcy fees, and we knew we'd have to wait a certain amount of time. As to the bankruptcy claims themselves, they traded at an appropriately large discount to the amount of bitcoin we were likely to receive. We knew it was going to be a number of years.

FTX is different. We don't know what was there in the first place. We don't know exactly how much was stolen. All we know is, most of it. When someone says there's a claim trading at a big discount to its value, well, that might be true, except we don't know what the value is. We don't know what the bankruptcy trustee is going to be able to recover, and then there's a further complexification because the Bermuda government has made the assertion that some of the claims are going to be seized by the Bermuda government.

Obviously, the holder is not going to be very happy with that. That's an issue that's got to be resolved in court. I don't know how these things can possibly be knowable at this point in time, and therefore, with regard to FTX, I'm not doing anything whatsoever. I'm not active in it. I look at it because, intellectually, it's interesting. There's no harm in looking, but I'm not doing anything whatsoever.

Thérèse Byars – Corporate Secretary

And that was our last question for today.

Murray Stahl – Chairman & Chief Executive Officer

Okay, well, I thank everybody for the questions. I thought they were pretty good, and I enjoyed answering them. If there's something that occurs to you that we didn't cover that we should have covered, or if it's a brand-new question, don't hesitate to contact us, because we'll get you an answer if we can.

And of course, we're going to reprise this in about 90 days. Thanks so much for joining us today. And thanks for all your support, and all that remains is just to say goodnight, and we always stay and answer every question, so hopefully you enjoyed it as much as we did. Thanks so much.

Steven Bregman – President & Chief Financial Officer

Good evening.

Murray Stahl – Chairman & Chief Executive Officer

And good evening.