FRMO Corp. Q3 2023 Conference Call
Tuesday, April 18, 2023

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 on this 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 third 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. I'm just going to touch on a couple of key points and then I'll address questions. You know where I was yesterday. I just got back today, so enough said on that subject.

I normally would read to you how much bitcoin we have and how much Grayscale Bitcoin Trust (GBTC) we have, etc., but in deference to some requests we had, it's now all on our website and you can see the tables, so I won't read it. However, with regard to bitcoin, I'm going to give a little further explanation and highlight what I don't see on this table.

On this crypto exposure table, there's one item I would have liked to have been included that didn't make it. So, I'll give you one further number. You'll of course recall that we own roughly 31% of Winland Holdings. Winland is, among other things, a mining company, and it owns 71 bitcoin. And we own 31% of that, so take roughly a third of that and add that in. I don't really talk about Winland a lot, so I'm going to take this occasion to address something I normally don't talk about. Then, we'll get into crypto, and I'll answer your questions.

Winland started out as an electronics company and it still has that business. Basically, it makes a variety of sensors. It's not a huge business, but it's a fine business. There was no reason to disturb that at all. And we added a crypto mining business. However, one of the interesting aspects of the venture is that we didn't invest huge amounts of capital in the machines. It's important to state that the way we look at this: When we buy a machine—and it's worth noting we pay for it in bitcoin—

we're buying mining equipment. We disburse X bitcoin, and the logic of the disbursement is that the X number of bitcoin becomes, in the fullness of time, X plus an increment of bitcoin.

The process of mining as a business is to turn it into more bitcoin. Yu're transforming bitcoin into more bitcoin. It's almost like bitcoin with interest, if you'd like, except it's not interest, because it's an at-risk investment. There's no guarantee of success.

About three years ago, we did the first of the Winland transactions. You'll recall, at that time, FRMO bought some machines, with bitcoin, of course. They were state-of-the art machines then. We subsequently swapped them in exchange for stock in Winland, and that's the primary way we've been able to increase our Winland position. Anyway, the number of bitcoin Winland has, which is all derived from mining, is available to you and, in round numbers, it's 71 coins. So, if you simply took the current price of bitcoin and multiply it by 71, you'd see that the value is much greater than the original cost basis of the machines.

So, what do we do? This is a good time to talk about it, because those machines, in about three weeks are going to be fully depreciated. When we bought them, the idea was that they'd last for about three years. So, you could look back at the price of Bitcoin that day (or the dollar value of the transaction) and see how much money we invested. Winland's bitcoin now is worth more than that.

Incidentally, it's important to note, so that it's obvious to everybody, that 71 bitcoin didn't come entirely from those original machines. We bought some more machines for Winland thereafter, but that first transaction was an important one for us. We didn't transform the first investment into 71 bitcoin; we transformed all our investments into 71 bitcoin.

In any event, it's a very profitable endeavor, and that's the way that I believe one should measure a Bitcoin investment. It leads one to a bizarre conclusion when people pose the question in the following manner and want a singular answer: What does it cost to mine a bitcoin? Because the problem is, even if you have a high profit margin, you have to account for the ultimate obsolescence of the equipment, among other factors. Interestingly, in this case, even though this first batch of equipment is now almost fully depreciated, we're still running it and we're still earning bitcoin with it.

In about three weeks, assuming the price of bitcoin remains where it is or goes higher, the equipment that will no longer have any book value is going to be generating more bitcoin. That was the logic of the investment: With our expertise from our other investment, HM Tech, we're able to maintain and repair the machines. We can get a lot more out of them than we put into them. That's the nature of the Bitcoin mining business.

What's the further implication? Well, there's all this talk about bitcoin and cryptocurrency ETFs, and it's all well and good. But it has a problem that Winland is designed to solve. What's the problem? If you had a cryptocurrency ETF, as opposed to a customary ETF, the singular distinction is that in a customary ETF that owns stocks and bonds, the expenses, whatever they happen to be, are paid for by the interest income or dividend income generated by the securities in the fund.

In the case of a Bitcoin ETF, there is no income, so the only way to manage a cryptocurrency ETF and pay for the management fee and other expenses is to sell a certain number of coins. To illustrate, let's create an imaginary Bitcoin ETF. It has X coins in it, and let's assume just for ease of computation that this fund is in steady-state mode. That means no new money is coming in to buy more bitcoin, no money is going out to pay for shareholder redemptions, so that the number of coins is constant. What would happen, even in steady-state mode, is that the number of bitcoin per share would be in constant decline, because there'll always be expenses.

Now, compare that to the figures I just gave you in Winland. The number of shares, you know what they are. We were actually increasing the number of shares when we did this Winland transaction, but the critical variable is the number of bitcoin per share. And the number of bitcoin per share, I invite you to do the calculation, is rising.

So, you have two different paradigms for investment in crypto. One, a simplistic holding model by its very nature, I would submit to you, would involve reducing, in the fullness of time, the number of bitcoin per share, if it were bitcoin. The other, for which we used Winland as an example, would produce an increasing number of bitcoin per share, and I invite you to consider which one is better. A lot of work has been done to make this possible, so it's not just me. There are many people behind the scenes, and I just want to say it's not myself personally, and that's another thing about how FRMO is evolving as a company. There are other efforts that we hope to turn into operating businesses one day, and we're doing it in our customary gradual risk-averse manner.

So, we're making some pretty profound changes, but we're just making them in very small steps, because the entire field of cryptocurrency is new for everyone, and every day is a learning day. I gave you a highlight of what's going on at FRMO with regard to crypto. All the other investments are in steady-state mode, and you've heard about them perhaps too much in the last several weeks, so I won't go into it unless somebody needs some precise answer to a question.

I'll invite Thérèse to read me the questions, and I'll be more than delighted to answer whatever is on people's minds.

Questioner 1

During the January 17, 2023 call, Murray said or implied that we can see in the financial statements what revenue FRMO received from its "ownership interest in HK, LLC revenue streams," but I don't see where that information is available, and Murray did not provide a quantification on the call. Would it be possible to provide this information in a timed series for the past three to five years or perhaps what you guys figure is the sustainable revenues without performance fees or one-time items? It sounds like whatever revenue is received is a straight flow through, so we can basically capitalize this revenue stream as the value to FRMO. Perhaps a 15x multiple or a 20x multiple would be appropriate?

Murray Stahl – Chairman & Chief Executive Officer

If you look under the revenue, fee and other income line, that's almost entirely the HK revenue share income. There are some minor fees that we collect from some other sources. They're really just rounding errors. If you need the real breakdown, we can give you the breakdown. Now, the breakdown you probably want is the performance fee versus non-performance fee. If you just went to all our financial statements over time, you'd be able to tell just from looking at them, because the years they go down, that's without performance fees. The years they go up, those are the performance fees.

So, you'd be able to tell anyway, but if it's possible, Thérèse, would you see about creating a table that details the performance fees and the non-performance fees. I have no problem releasing that information, so if people find it helpful, let's get them the data.

Basically, with these modest exceptions—and they're truly modest, maybe it's not even worthwhile breaking it out, because it involves a certain amount of work—almost the entirety of what we call "fee and other income" is the HK revenue share, so I hope that's a sufficient answer for the moment.

Questioner 2

In responding to my question on the last earnings call about the ownership interest in HK that sits on the balance sheet at $14 million or so, I'm not clear how we as outsiders who don't have visibility into the HK financials can estimate its true value today, let alone where it might be in the future. I think we all know it's a lot more than the $14 million historical cost, but how much more? Is there any information that can be provided? Or if it's already provided, please let me know where to look. That would shed some light on what the business generates in terms of sales, profits, etc., so we can make an educated estimate of what FRMO's 5-percentish ownership interest may be worth.

Murray Stahl – Chairman & Chief Executive Officer

That's a fair question. There are a number analytical approaches you can use. I personally would approach it methodologically in the following manner. You look at the number, which as of February 28th, was $15 million-plus. That value is largely derived from the investments that are held on the balance sheet of HK. There is some plant equipment—be it computers, leasehold improvements, things of that nature, office furniture—but the bulk of it is the investments.

If there was no money under management whatsoever, that number wouldn't change tremendously. So, the question is, all the money we have under management, what is that worth? There are different ways of approaching it. Some of the AUM can generate performance fee income, which might get a higher valuation multiple. Some of the assets are subject to conventional investment management fees that arguably deserves a lower multiple. Analytically, I would look at it as a diversified investment management company, especially one that has some really interesting projects on the move, like our involvement in crypto.

By the way, we also have some crypto investments at HK, one of which is HM Tech, because HK owns a 50-plus percent in HM Tech. I would argue that's probably worth more than the carrying value. In any event, if we take the assets under management with, let's say, roughly $7.2 billion, and if you valued it at 3% of AUM, you could do the calculation.

If we have a carrying value of X, and if it's applied roughly at 5% interest, you would divide by .05 or multiply it by 20. If you did that, this number of $15 million gets you $300 million. And then you'd multiply the assets under management by 3% or .03, if you like. And the sum of those two numbers, I would think, would give one a reasonable valuation. The 5% interest, you could divide it by .05, and I think that would be a fair approximation of the value. So, that's a methodology. You'll have to do the calculation. I hope you find it adequate.

Questioner 3

How should we think about the current value of FRMO and whether it's undervalued today? The majority of the assets, as best I can tell, are valued at fair market value: TPL, GBTC, the funds, etc. So, this is clear cut as to current value. There are lots of relatively small investments measured at cost, but they don't seem that material. The primary assets I can see on the balance sheet that could be materially undervalued are the two I've inquired about above. Perhaps they're worth as much as $100 million or so more than stated book. FRMO's tangible equities, netting out non-controlling interest, is $224 million, or $5.09 per share. If I add in $100 million of excess value, above book value for these two assets, I can add another $2.25 per share and get to perhaps $7.35 per share or so. Are there any other meaningful chunks of undervaluation on your balance sheet where there's another $100 million of value?

Murray Stahl – Chairman & Chief Executive Officer

I don't know how much undervaluation there is or not, because that's entirely a subjective criterion. I can just tell you what we're trying to accomplish, which is to build an operating business out of literally nothing. That operating business, or you could even say several operating businesses, relate to cryptocurrency. Some of it relates to bitcoin mining. Some of it relates to, you would say, cryptocurrency infrastructure and support, like HM Tech.

We don't know how cryptocurrency is going to develop in the future. Personally, I'm very optimistic, but the entire cryptocurrency project is still an unproven enterprise from everyone's point of view, and as I said earlier, we're still learning. So, I would be hesitant to say what the valuation of that might be. In success mode, obviously, it could be pretty considerable. Let's look at it this way to try to give you an idea. I'll just bring it back to Winland.

So, we buy these machines. We put them on the books, and we have to estimate a certain useful life. We estimated three years. Maybe that's too conservative, maybe it's not. Other publicly traded companies use five years. Maybe that's a better estimate, but our experience in the mining space is that the machines become obsolete in something like three years. In the case I just cited, they're very happily not in that circumstance, but it could change in weeks, so we'd like to be conservative.

In any event, we took these machines and we converted those assets, which have a relatively modest finite life, if you want to look at it this way, to bitcoin, which has infinite life. Let's look at it in an inflation sense. Imagine we were a gold mining company. But instead of mining gold and selling it, we're only selling enough gold to pay our operating expenses, and we're keeping the remainder of the gold.

Let's just say we're a gold mining company in the year 1900, and that was our practice. We would sell enough gold to cover operating expenses and put the remainder in a vault. No company ever did that, with one exception, which was Goldcorp. It was a Canadian company that was ultimately acquired by Newmont, and Newmont ceased that practice, so the world has very limited experience with that practice. But let's just say there was a company in the year 1900 extracting gold and just left the gold in the vault, meaning on its balance sheet. What would be its net asset value today relative to a company with the same production that just sold all its gold along the way? I think the answer is obvious. It would be much, much higher.

In a sense, that's what we're trying to do. Now, it's a little more interesting in the case of crypto for the following reason. In the world of gold, if the price gets high enough, the world's going to extract more gold, so there will be a lot more supply. In the case of Bitcoin, no matter how high the price gets, only roughly 1.6 million more bitcoin are ever going to be mined. For the next 375 days, roughly, they're going to be mined at the rate of six and a quarter every ten minutes.

In 375 days, there are going to be 1.3 million coins left, and we know what the rate of production of those 1.3 million coins will be between that date—roughly a year from now—and the year 2140. So, there's a lot of scarcity value. It's called digital scarcity. If you can enforce digital scarcity, would that be a better tethering device for currency than gold? Obviously, the world's fiat system is breaking down. I would argue that even though there's a lot to be said in favor of gold—and we have gold-related investments—there's enormously greater potential for digital scarcity. That's assuming it can be faithfully executed, which is still an open question, but I believe it can be done. We're building a company that is going to hold digital scarcity instead of gold scarcity.

What would that theoretical company in 1900 have been worth? Would it have been worth the value of the mining equipment at 1900 prices plus the small amount of gold it had in the vaults? Was it worth that? Or would you have been able to make some assertion for what the gold price might be in the far future, since your business model is going to be unchanged for the next 123 years? Are you entitled to make some kind of assertion as to what your net asset value is ultimately going to be and then discount it at a different rate?

It's just an open question. I don't know the answer to that question, but that's the valuation paradigm that has to be solved, and that's what we're trying to do. If you think the enterprise is going to be successful and it's going to have an appropriate growth rate, well, then you know what the answer is. If not, then you would value it at net asset value. That's the valuation enigma, so to speak. I hope that's responsive enough.

Questioner 4

Please elaborate on what entails a non-cash fee revenue.

Steven Bregman – President & Chief Financial Officer

That's cryptocurrency mining revenue. That's how, on an accounting basis, the income is booked as the crypto is mined, because the crypto is retained on the balance sheet. The sales value of it, the market value, is calculated as it's mined. That's just an accounting entry for the value of the crypto at the moment of mining.

Questioner 5

I wanted to see if you had any thoughts on the rise in mergers and acquisitions activity we are seeing in the oil and mining sectors. Just in the past week, we've seen Exxon connected to Pioneer Natural Resources and Glencore attempt a takeover of Teck Resources. Should this activity bode well for FRMO's holdings, either direct or indirect, via revenue from the inflation ETF?

Murray Stahl – Chairman & Chief Executive Officer

Well, let's do it this way. In the world of gold, you could make the assertion that, something like two years from now, there may be what mining executives describe as a hold in production. That means that, unless something is done roughly two years from now, production is going to drop. Why is it going to drop? Because as an industry, we really haven't been investing in the way the industry has historically invested. Two years is not enough time to start projects and bring them to production levels, so that explains the merger and acquisition activity.

Oil is the same, with one singular difference. That difference is there's a slight geopolitical dimension to oil that doesn't really exist in the world of gold. You'll note heavy central bank buying of gold in the last six or so months. But that's nothing like the geopolitical orientation of oil. What's the geopolitical orientation of oil? You will observe that the nation of Japan, a little while ago, announced they're going to buy Russian oil. They were part of the sanctions against Russia, so the oil is now going to be moving east to Japan.

You'll also observe that Saudi Arabia has made oil deals with China, and the oil is going to be sold for Chinese currency. Presumably, Saudi Arabia will use the Chinese currency to buy products from China. That's in addition to an OPEC cut, though who knows if that's going to be successfully carried out or not? In any event, from the Persian Gulf, you already had Iranian oil moving east to

China, and now Saudi oil will be moving east to China. And the Chinese have lifted all the growth constraints on their economy, with the obvious implication for oil demand.

As a counterpoint to production cuts, the Ukraine war and the Chinese lifting of growth constraints, you can see what the investment in oil is—or, more accurately, the lack of investment—just by looking at the global rig count and the U.S. rig count: We've got an issue in the world of oil. There's not enough time to make the investments that need to be made—if they indeed could even be made—given the hostility towards the energy industry, so the next logical thing to do is to engage in mergers and acquisitions activities.

If the food industry historically became an oligopoly, and if the communications industry became an oligopoly, while the information technology industry is an oligopoly—there are lots of oligopolies in the world—why would people think that the world of metals and mining wouldn't be an oligopoly? And why would people think that the world of petroleum wouldn't become an oligopoly, especially since, going back over a century, that's exactly what it was? So, I think we're heading in that direction, and that's part of the inflationary hypothesis. I hope that's enough.

Questioner 6

The next question is from a shareholder self-described as a "nerd who likes libraries." On the Horizon Kinetics website, many of the pages have a picture of a library that appears to be computer art. If any are an actual location, please name the library and the location adjacent to the picture on the website. So, less of a question, more of a request for Horizon.

Steven Bregman – President & Chief Financial Officer

I can understand—I think they're so beautiful. And some of them are so odd-looking to us in the 21st century, versus 18th to 19th century space and architecture and art devoted to these rooms, that one might think they were artificially constructed.

So, the names of the libraries are: The Stephen A. Schwarzman Building of the New York Public Library; the State Library Victoria in Melbourne, Australia; the Stuttgart City Library in Stuttgart, Germany—that's the one that's all white, it looks like a plastic building block construction. There's the Morgan Library & Museum in New York. There's the George Peabody Library in Baltimore, Maryland; the Trinity College Library in Dublin, Ireland; Yale University's Beinecke Rare Book & Manuscript Library and the Strahov Library in Prague, Czech Republic.

I took that question also as a request, and those at Horizon Kinetics who deal with the technical aspects of our website are now working on attaching those designations to each of the matching photos, so that should be coming.

And those photos were chosen, by the way, by other employees who have been, in the positive and constructive sense, inculcated by Murray with an appreciation of history and old and rare books.

And so they, as a group effort, selected these various photos, which they properly paid for, because we believe in intellectual property rights, from the purveyors of those images.

Questioner 7

Does management have any family members that also hold significant amounts of FRMO stock?

Murray Stahl – Chairman & Chief Executive Officer

Me first, and then, Steve, you can answer. In my case, it's in my name and my wife's name, no other family members, to the best of my knowledge, have anything that's meaningful that you could add to the total.

Steven Bregman – President & Chief Financial Officer

In my case, I did not share it with my family, but my wife did request some years ago, many years ago, that she wanted me to buy a hundred shares for her, which I did. Her motives for that might have been different than mine might have been. Her training is different. She also once asked me to buy a hundred shares of Facebook, which I did as requested. I don't necessarily agree with all of those choices, but I was serving her interests.

Questioner 8

Given that for FRMO, "the identification of any business opportunities will follow the process employed by Horizon Kinetics," could management describe what this process is, as well as provide some color as to what the culture of Horizon Kinetics is like and how it is maintained? How are decisions made between the founders of FRMO and what are the main things that management is looking for when identifying attractive investments that may be different from what other investors are doing?

Murray Stahl – Chairman & Chief Executive Officer

Well, those are a lot of questions. It would require a lengthy period of time to answer them all, so I'll try to distill it into something that's relatively digestible. Let's do it this way. If you made a list of the companies in the S&P 500, those industries generally represent the investment alternatives. So, the sectors, the industries, those represent the investment alternatives examined in groups.

The trouble is that there are different industries: there are utilities, and there's banking or finance, if you like. There's technology. And to us, those investment choices pose two really big problems. The first problem is that in some of them, let’s say banking, it’s very hard to do due diligence, because you’re dealing with a lending portfolio, and it’s very hard to figure out what’s in there and how creditworthy it really is. So, the analytical problem in some industries, and we'll leave it at that, is just beyond our ability.

The second problem is that, for some of the industries, although they're within our circle of our competence, most of the business opportunities are fairly mature. We can understand them, but remember, these being the S&P industry sectors, the individual companies, they're very large, large within their sectors. I'll just pick a company in the S&P to illustrate. I'm not picking on this company and I have nothing against it, I'm using it as an example simply because it's an obvious example.

If I were to choose McDonald's—again, I have nothing against McDonald's—the food, after many decades of expansion, is available, generally speaking, throughout the planet. Anybody who wants it could buy it. Anyone who chooses not to consume it, whatever their reason is, will not consume it. Consumer preferences, such as they are, are largely fixed. So, how can one grow that business? The answer is only at the expense of a similar business. World food consumption, given the population growth trend, is not going to increase dramatically. What might change is the choices people make, either for one company or against one company.

In the same way, a lot of the S&P 500 companies' business prospects are kind of static, and that's problematic if you want to grow net asset value. Once you think of that—and there are hundreds of examples, I just gave you one—it's easy to say, why doesn't FRMO buy Business A or Business B or Business C? Surely, there must be some that are within your circle of competence, and of course, there are, but then we have to deal with the problem of stasis. And in a mature industrial economy, that might be an unmanageable problem.

So, if you really want to grow net asset value, we have to take what limited skills we have and apply it to an emerging business. Looking through the range of emerging businesses, what are the choices? Well, we could develop pharmaceuticals, but we obviously don't have the expertise or faculties for doing that. We could develop artificial intelligence, but I don't have to go into it, because you know we're not going to develop artificial intelligence. So, we have to pick something that is within our circle of competence, where we have more than adequate capital to invest in it without risking the bulk of our capital. And that's how our cryptocurrency investments came about.

There may well be other related opportunities in the crypto space, and there may be related opportunities in the financial services space in sectors like exchanges, custody and businesses that pertain to financial management. That's where the bulk of our effort has been directed these last six or seven years. We selected the cryptocurrency space, going back to the example of Winland, because it's a cleaner company. It doesn't have all the different investments that you have in FRMO. Basically, as I said before, we're taking an asset and growing the asset at its internal rate of return by converting it into mining equipment, which then becomes converted into a permanent asset.

How many businesses in the world are there where you can acquire a capital asset, which has a limited life, and convert it into a permanent asset? You can't do it in energy, because the reserves have to be consumed. You could theoretically do it in gold or silver, even, if you wanted to hold all the gold in your balance sheet and not sell it. It's just that we can't find a business like that to acquire, because nobody does that. If there were a company that did that, we would be very interested. The closest version you can find are the royalty companies, where you look at the future earnings stream. For a gold-based royalty company, there's gold in the ground, but it's going to be converted into cash. So I hope this gives you an insight into how we came up with our ideas and how we then deployed the resources we had available, both capital resources and human resources.

The process takes a long time. It's a lot of discussion and a lot of small attempts, and before we commit any meaningful amounts of capital, a great deal of thought and discussion goes into it. Over the years, if you look at all the transcripts of these calls, and you compare the early ones with what we're doing right now, I think you'll see the evolution of the ideas play out. Remember, we're learning as we go, because no one's ever written a textbook on this subject. If there were a textbook on this subject, chances are it'd be a mature industry, and maybe we wouldn't even be interested in it, but I hope that gives you some insight.

Questioner 9

Mr. Stahl has in the past talked about how the investment case for Bitcoin revolves around the idea that Bitcoin and blockchain enables Hayek's idea of the denationalization of money. Some questions I have around this thesis are, one, the global currency market already exists for existing sovereign currencies to freely compete for people's adoption, does it not? For example, my understanding was that Venezuelans prefer to transact in U.S. dollars, rather than the domestic currency, which is actually Thiers' law, not Gresham's.

And two, given the first point, has the euro-dollar already won the competition of currencies, the euro-dollar being backed by the "energy" of the military and political breaches of the world's only superpower?

Murray Stahl – Chairman & Chief Executive Officer

I'd answer it this way. The dollar, the euro, all the currencies, have one thing in common. They are fiat currencies, and they're constantly debasing. Although you could say that, well, the nation backs it, the obligation of the nation is only to give you a unit of currency, so it's value is not tethered to anything, to any fixed value. If you happen to have a dollar in your pocket, and you pull it out, and you look at it, what does it say on top? It says, "Federal Reserve Note." What does that mean?

That means if you went to the Federal Reserve and you wanted to exchange your dollar for this other dollar, you can do it. If you want to get an asset, though, you have to go on the market and buy it. So, basically, what is a dollar? A dollar is just an obligation of the central bank, an IOU, for another dollar, with no interest. Basically, it's a non-interest-bearing perpetuity. That's what money is. That's all it is. The money supply is increasing and it's increasing in every place in the world faster than the supply of goods and services.

So, if the money supply increases faster than the supply of goods and services, you get inflation. If the money supply decreases relative to the supply of goods and services, you get deflation. Fewer dollars chasing the same quantity of goods leads to deflation. It's very, very difficult to keep the money supply at match with the production. In this particular case, globally, no one's trying to, anyway. So, there are nations like Venezuela that have a chronically high inflation rate. The U.S. dollar is superior only because the inflation rate in Venezuela is so high.

When we talk about inflation and about debasement, we're only talking about a difference of degree. If it were possible to be long the dollar and short the Venezuelan bolivar, you could make a lot of money on that spread. But how do you sell short the Venezuelan bolivar in the controlled economy? Operationally, it may not be feasible.

The world has two choices, two fiat money alternatives, at the moment: There are precious metals and there's fixed-supply crypto. Even though the idea of tethering a currency to precious metals to prevent debasement is a good idea, there have even been episodes in the history of precious metals leading to serious inflation, like the influx in the 16th century of gold from the so-called New World to the Old World. That was a great inflationary episode of history, and some historians argue the world still hasn't recovered.

Some people call it The Price Revolution. If even gold and silver can have debasing values, then there really is a market for something that we would call digital scarcity. Hayek, in *The Denationalization of Money*, never thought it out that far. He was never able to envisage how you would overcome the authentication problem, because the technology didn't exist. He could only envisage that you have to take money away from the governments and the central banks. But how do you know the people who control it will abide by a set of rules?

The answer was, of course, you can't know. That really answers the second question, what mechanism is going to assure you that they are indeed abiding by the rules? There was no mechanism until the advent of blockchain, and really, until the advent of Bitcoin. In the case of all these other cryptocurrencies, maybe I'll pose a question that you didn't ask or maybe you thought about, so I'll ask it for you: Why can't these other currencies play the same role?

The answer is—because of governmental mechanisms—in most cases, there's a committee of people that could theoretically change it—change the monetary policy— if they felt like changing it. In the case of Bitcoin, only the majority of the users could change it. I personally think it's very unlikely, but I could be wrong. Even so, let's say the majority of Bitcoin participants decided they would like to debase this currency. But you see, you still have protection. Your protection is that it's open-source code, so you could, by yourself, fork Bitcoin and leave it in its undebased version, the same blockchain. Now, maybe only a minority of people want to use it. And that's fine, because you don't need the majority of people to accept it. All you need is a community of users, however small, who will be able to exchange a currency that is not being debased.

Anyway, I'll come back to the thrust of your question. I don't think any fiat currencies on the planet are going to be able to displace or replace crypto. Recall, there is not a single recorded instance in history of a currency that didn't ultimately get debased to zero. One other thought I will leave you with: Go on the SEC website and look at how many people are being hired with an expertise in crypto, and that's the U.S. government. I think that tells you everything you need to know about the future of crypto.

Questioner 10

This is a rather long intro to a couple of questions related to Hayek and Gresham's laws. From the third quarter of the fiscal 2022 FRMO conference call, it appears that management is betting on the store of value case, wherein people aim to hoard the asset in contrast to the medium of exchange case. In the store of value case, does Hayek's money denationalization even matter, since he appears to actually favor Thiers' law?

In *Denationalization of Money*, Chapter 6, titled “The Confusion About Gresham's Law,” Hayek seems to argue against the hoarding tendency of good money. He mentions that Gresham's law is "not false, but it applies only if a fixed rate of exchange between the different forms of money is enforced." "Enforced" is the key word here, which does not seem to be the case in our current world, where a free market of global currency exchange exists, which includes the ability for people to freely exchange U.S. dollars for bitcoin. That is, "bad" money enforced by governments will not "drive out the good," and will not remain in circulation because a floating rate exists between currencies.

In what seems to be further implicit support for Thiers' Law dynamics, relating to Bitcoin's inflation hedge narrative, Hayek claims that "whenever inflation got really rapid, all sorts of objects of a more stable value—from potatoes to cigarettes and bottles of brandy, to eggs and foreign currencies like dollar bills—have come to be increasingly used as money." From this perspective, applying Hayek's thoughts to Bitcoin seems to be actually making an argument against the store of value case for Bitcoin.

In fact, as a practical example, in the previous quarterly call, Mr. Stahl mentioned that crypto mining companies themselves are transacting in bitcoin rather than transacting in U.S. dollars and hoarding bitcoin. Given this information, I wonder how much of Bitcoin hoarding is based on lost keys or on some factors other than Gresham's law. The bottom line question: Is management's apparent dual reliance on Hayek's work and Gresham's law inconsistent?

Murray Stahl – Chairman & Chief Executive Officer

Before I answer, let me define some terms, just so everybody knows what we’re talking about. Gresham's law states that bad money drives out good. In other words, the so-called sound money, you would hang onto that, what people term "hoarding." If they want to buy something, they would use the debasing currency. There's the opposite view, called Thiers' law, that says, basically, good money drives out bad.

So, the good money drives out bad, where does that come from? That’s the perspective of people who have goods and services to sell: why should they accept debasing money? They want the sound money. In the instances where these laws came to play historically, the originators of these laws were thinking about gold. So, for Thiers' law, those people with goods or services to sell would say, "Yes, I understand that there's plenty of debasing currency available, but I as a seller of some product don't want that. I'd much rather have the gold." And in different circumstances, we've seen different situations occur.

Just to show a historical example, during the Civil War, when the North had to buy all kinds of goods and services for the military, that might be an instance where Gresham's law actually came into play. Even though the government set the price of gold, gold traded at way above the price set by the government. You could also take the case of post-1945 Germany: There was occupation currency, but no one wanted it. Why not? Because the American occupation authorities gave the production plates—the printing plates for occupation currencies—to the Soviets. And the Soviets obviously made use of that privilege.

So someone who happened to have real goods and services that people wanted, wouldn't sell it, generally speaking, for occupation currency. That's why desired items like bread and cigarettes became currency. What was the problem with that? They worked for short-run purposes, because you need these things, they actually became the equivalent of money. But for long-run purposes, you can't store bread. You can't even store cigarettes for very long periods because they become stale. It's hard, in practice, to enact Thiers' law for most products, although in the case of gold, it's been observed to happen. It's also been observed in silver.

Anyway, I just wanted to give you that background, so you'll know where we're coming from. We're not relying on a store of value theory. We're not relying on a transactional theory. We're not relying even on Hayek's conception of what money is supposed to be. All we're asserting is that the post-World War II fiat money system is breaking down. There's going to have to be an alternative to that. They weren't as visible before, but now, the cracks in the system are highly visible, because there are nations openly saying they want to move away from the dollar as a world reserve currency. If that happens, we'll really have untethered inflation in the dollar, and probably in other fiat currencies as well.

We just don't know what the world currency situation is going to look like in a few years. All we know is the fiat system is breaking down. Bitcoin is merely one possibility. It's not the only possibility. The reason I personally like Bitcoin is because it's not within the control of a small group of people, and it has open-source code. Relative to commodities that are ultimately consumed, I think it's better than a commodity standard. In certain respects, it's even better than a gold standard because, given the purchasing power available relative to the current market capitalization of total gold in the world, there's no limit to the number of ounces of gold that could be created.

As far as people losing their Bitcoin keys, I don't think it's a large factor. It's X percent, and chances are that X is in the single digits. I don't know if it's 3% or 4% or some other proportion of keys that are lost, so you can say the effective supply of bitcoin is maybe 4% or 5% less than the actual supply of bitcoin. That might be true, but we can't say at this point whether it's going to be Thiers' law or whether it's going to be Gresham's law that operates. We don't know if it's going to be hoarded.

This is nothing other than idle conjecture, so in an investment sense, we're not guessing. We just think that a system of digital scarcity is superior to any other system. That's the only assertion we're really making. But if you want me to guess what's going to happen, it's that governments, for purposes of expenditures, are going to use their fiat currency. For purposes of revenue, they—let's say it's the U.S. government—will accept the dollar, of course, as legal tender for payment of taxes. But I believe one day they're going to accept bitcoin, and ultimately, I believe the government is going to hoard it.

I believe the day is going to come when people will be able to pay their taxes in bitcoin. If that happens, and if you own below-basis bitcoin, the government might even let you pay taxes without realizing the capital gains on its appreciation, to encourage you to pay with it so that the government can collect a store of it. It will build a holding of crypto and use it as a device to try to rescue governments from insolvency.

I really believe that's going to happen, because the way it's going, you have a lot of governments that are on the road to insolvency. They won't really default, they'll just keep creating currency. But the financial situation of most governments in the world is actually pretty dire. That's how I think it's going to ultimately evolve. So, we're not making a bet on hoarding or the opposite. All we're willing to say is that digital scarcity is better than the available alternatives, and that's about as far as it goes right now.

Questioner 11

Can you please discuss in further detail the expected value of the Mt. Gox claims, its timeframe of realization—i.e., early payout in 6 to 12 months versus late payout in many years—and what you intend to do with the proceeds? Since it will likely be received in bitcoin, will you simply hold? I'm aware that you've mentioned in the past that you are sharing in the upside with some of the claims' sellers; however, it would still be great to put a rough number together on how many bitcoin you anticipate receiving and what that'll mean for Winland and FRMO holders.

Also, what was the cost basis of the investment? Is it the full $350,000 on the balance sheet or does that figure include other bankruptcy claims purchased? Really looking forward to hearing more from you about these claims and other investments.

Murray Stahl – Chairman & Chief Executive Officer

Well, this is one of those questions we get from time to time that I would like to answer—certainly, it's relevant and I believe anyone would find that the investment has been worthwhile—but which I'm cautioned we would be ill-advised to make any valuation comments about until Winland itself discloses it. I'm sure everyone understands the nature of those cautions. Of course, I suppose one could contact Winland directly—I don't want to preclude anyone's freedom of action—but our constraints are really Winland's prudent constraints.

Questioner 12

Why are there no first quarter and third quarter transcripts for fiscal year 2021 and no first quarter transcript for fiscal year 2022? On the FRMO website, they appear to have been skipped over. This was discussed in the previous meeting, but I also now notice that the FRMO website directory has been changed to quarterly conference calls rather than quarterly conference call transcript, and the most recent quarterly call only remains available as an audio replay. Does FRMO plan to discontinue including text transcripts in the future?

Steven Bregman – President & Chief Financial Officer

I'm glad that I was reminded again. We did some catch up with some of the old inventory of transcripts, probably before the prior quarterly conference call. Between the prior quarterly conference call and today, the January 17th conference call transcript has been created. It just hasn't, unfortunately, yet made its way through the process chain to be on the website, but I dare say it will probably be on the website by tomorrow or the next day.

As I mentioned last time, I've been engaged in trying to find an editor of suitable skillset, which includes sufficient financial background and professional writing background, and that person I have found. We worked together for a little bit a couple of months ago. He's actually been finishing a very high-level business journalism fellowship at Columbia Journalism School, and that semester is going to be over within the next few weeks. One of the first things I'll have him do is to get through the backlog of the transcripts. He's actually very highly qualified and I'm looking forward to working with him.

Questioner 13

In the recent FRMO Corp./Fromex Equity Corp. "Top Five Holdings + CMSC" report published to the FRMO site on February 28, 2023, the MIH Investments market value is recorded at $12.8 million. I assume this is Miami International Holdings, Inc. How is the market value calculated here? As in the official quarterly report, the investment is carried at cost of just $4.3 million. In a similar vein, could you also elaborate on how the CMSC market value is calculated? Thank you.

Murray Stahl – Chairman & Chief Executive Officer

The market value we own of Miami International is the outgrowth of the original Miami International Investments purchase, plus the writeup of the Minneapolis Grain Exchange. What happened was, we exchanged Minneapolis Grain Exchange for MIAX, so that higher value is the value we received in exchange at the then-valuation for MIAX. When that deal was done two years ago or so, that was the valuation we got.

I believe the carrying value is something on the order of $7.25 or $7.35 per share. We have the original cost basis of the MIAX that we bought years ago. And the bulk of our MIAX is the MIAX that we acquired via the Minneapolis Grain transaction. Also, you will recall that MIAX bought the Bermuda Stock Exchange from us, bought it from everyone, actually. We got MIAX shares for that.

So that valuation you see is roughly seven and a quarter dollars per share. I may be a few pennies off, but let's say seven and a quarter to be conservative. It's the value we got at exchange at that moment in time. So, it's not the cost basis anymore. It's the value we got in exchange for those two transactions. If you go back to prior annual reports or prior quarterly reports, you'll see we had Bermuda and Minneapolis. That's where the valuation comes from—that was the fair value at the time of the transaction.

Questioner 13 (continued)

And just to clarify, when you say MIAX, you are referring to Miami International Holdings. Am I correct?

Murray Stahl – Chairman & Chief Executive Officer

I'm referring to Miami International Holdings, which we affectionally call MIAX.

Questioner 14

Management and Horizon Kinetics have talked often about U.S. debt-to-GDP and the unlikelihood of rates being raised very high. Given the rate hikes of 2022 that were some of the most aggressive in decades, how high would rates need to get, or what other data would management need to see, to reconsider their thoughts on the Fed's willingness or ability to hike to levels comparable to the 1970s? There is, after all, surely data that the Fed has that is not publicly available.

Murray Stahl – Chairman & Chief Executive Officer

You don't need data from the Fed, so let's put it this way. The 10-year Treasury yesterday was yielding 3.58%. I'm going to just look it up right now, it'll take me one second. On the day when the Fed began its aggressive interest rate increases, the 10-year Treasury on June 15, 2022 was 3.33%.

So, yes, the Fed raised interest rates very aggressively, but the market resisted. The market resisted because the economy can't handle it, so the yield curve became inverted. When the yield curve became inverted, this created a mini banking crisis. Why? Because the banks' long-term assets are earning less than their short-term assets or the short-term liabilities—their customers' deposits, essentially. And that's a problem. Why should people keep their money at—I'm making up a number—2% in the bank, when they can buy a Treasury bill and get twice that?

So the rate increases led to a potential demonetization of the banking system, which is exactly what we're referring to, and the economy couldn't withstand it. Now, look at the federal funds rate. Check the federal funds futures and you will see what the financial markets are implying for the future of interest rates. They're lower, not higher.

I gave a lecture on this subject recently at Fordham University, so I'll encapsulate it. I'll give you the hundred-second version. The basic problem is that the industrial economy of 100 years ago, or maybe 125 years ago, was capital intensive. Policymakers could largely control it with monetary policy, changing interest rates. In the modern economy, 40% of all GDP is government spending. It's federal, state and local. And that keeps rising. So, 40%, at least so far, has been immune to any change in interest rates. That, in itself, is significant, but it's not the end. Why is it not the end of what might be called a policy confounding element of the modern economy?

Let's say you took the healthcare industry. Half of the healthcare industry actually comes from the government in the form of Medicare and Medicaid. The healthcare industry is roughly 20% of the economy. Half comes from the government, so it's already accounted for in our calculation, but the other half is private. Are people dissuaded from taking treatment for the various ailments that afflict humanity because interest rates are higher? I think not, so no one's going to defer, or very few people are going to defer, necessary treatment because interest rates are higher.

I can go on. Higher interest rates are not going to deter people from private education. It's not going to deter the food industry and the utility industry. With utilities, higher interest rates are just a regulatory rate-based pass through. The electric utility gets a rate increase from the utility commission no matter how high the rates are. I could keep going in that way, but I don't want to exceed the hundred-second self-imposed time limit, but you get the idea.

In a modern economy, you can't apply the interest rate policy tool. The modern economy is organized in a way that was inconceivable when Professor Irving Fisher of Yale University devised monetary theory. So, we're going to have to think of something else. The trouble is, I don't know what that is, and nobody else does either.

Questioner 15

Does management have any thoughts or concerns about "Operation Chokepoint 2.0" as originally raised by Nick Carter of Castle Island Ventures, as well as the Cooper and Kirk Law Firm later parroted by the *Wall Street Journal*? The concern is around a perceived coordinated effort by regulators and banks to make it more difficult for cryptocurrency companies to operate.

This effort is said to include things like pressuring banks to stop providing services to cryptocurrency companies, launching investigations into cryptocurrency companies, and making it more difficult for cryptocurrency companies to obtain financing. A certain bank held by Horizon Kinetics Blockchain Development ETF was recently shut down by regulators. Are crypto frogs getting boiled here?

Murray Stahl – Chairman & Chief Executive Officer

I don't think so. That's one side of the coin, and note that those are opinions. So now, let's go to some facts. The Chicago Board Options Exchange, CBOE: Look at their ever-extending digital asset exchanges. NASDAQ just established a cryptocurrency custody unit. And the London Stock Exchange, not very many days ago, announced the creation of a group to clear crypto transactions. Those are all regulated entities. Those can only be done with regulatory approval.

So I would say, in reference to what people would refer to as Operation Chokepoint—it's a frightening thought for one and all—is that I don't think the typical bank and cryptocurrency mix very well. I don't think crypto and leverage mix very well. I've said that many times. Remember, the typical bank is ten times leveraged, so one wouldn't want to encourage much in the way of banks and cryptocurrencies.

The securities exchanges are an entirely different mechanism, so what people refer to as Operation Chokepoint is merely a way of directing cryptocurrency into the properly regulated transparent units—and not an effort to, in any way, inhibit the development of cryptocurrency as an asset class. Those are just three examples of regulated exchanges. And who are they regulated by? Obviously, the government, so the assertion that there's some organized effort to destroy crypto, I guess it bears scrutiny, but it doesn't withstand scrutiny.

Questioner 16

In the past, management has talked about the idea of uplisting FRMO to a larger exchange. Does this mean OTCQX or does this mean a major exchange like the New York Stock Exchange? What actual benefit is there to FRMO attempting to list on a major exchange?

Murray Stahl – Chairman & Chief Executive Officer

The answer, quite simply, is, like I said before, I have been otherwise preoccupied by a variety of things. I haven't devoted very much effort to it, so it's a mea culpa. At some point in the future, I'll have the free time to address this very important question. But at the moment, I just don't have the available time to give it the consideration that it requires, so I'm just going to leave it at that.

Questioner 17

Is it a problem that over 50% of all bitcoin nodes are hosted in unknown geographies? For example, over 50% of bitcoin nodes are running on the Tor network. What are management's thoughts on the concentration of mining pools in the Bitcoin network and the geographical concentration of those hosted pools?

Also, how does management think about the lack of clawbacks of bitcoin in the case of fraud and how that hinders adoption?

Murray Stahl – Chairman & Chief Executive Officer

Let's do the fraud question first. First, the Bitcoin blockchain has never been hacked. A central idea of Bitcoin is that the blockchain is immutable. If you're going to have the same sort of policy that a bank would have—that is, to allow clawbacks—and somebody can hack the Bitcoin blockchain, then you probably don't want to own bitcoin anyway.

The reason might not be readily apparent, but think of it this way. If we're going to have a clawback policy, that's going to require a committee to decide on how this actually happens and in what cases it actually happens. And now we get right back to centralization, and that's just another step to a central authority getting control over the bitcoin, and before you know it, we're going to be debased.

The presumption that you have to live with is that no one will be able to hack it. If no one's able to hack it, we don't need any clawback policy. So, I'm not encouraging that.

As far as the nodes are concerned, if we knew exactly where every node was, it would be a lot easier to hack. If we want a system that's so far, at least, impervious to hacking, why do we want it to be public knowledge where every node happens to be, so that someone—maybe a bad state actor with the resources to devote to that problem—could actually figure out a way to hack it? I don't know what nation would undertake it, but there are nations with the resources that might try. The whole idea is that anonymity—or, let's say, independence or resistance to a certain amount of scrutiny—is a good thing if you want to protect the currency from those who would otherwise seek to control it.

For example, yesterday I started reading a book on the rescue of Norwegian gold when the Germans decided to occupy Norway. If you were living at that time, you might suggest, "Isn't it a great idea that we know exactly where the gold is, and we know it's safe and secure?" Well, you want to know exactly where the gold is, but then the people who want to seize the gold would know where it is, too. And when the Nazis invaded Norway, they went straight for the gold. So, maybe it would've been a lot better if, in this particular case, the gold was rescued, but that wasn't always a guaranteed outcome.

To sharpen the analogy to Bitcoin, wouldn't it have been a lot better if there wasn't a central depository for gold, and that individuals could own gold, as a way of preventing its seizure? That was one of the problems in World War II. We've never even found an answer to it. Gold reserves of various nations were seized, and some gold and some art worth tremendous sums of money have never to this day been recovered. Do we really want to do that with bitcoin? I guess it's a debatable question, but I have no desire to see it centralized and get answers to all those questions and for that very reason also make it easy for the hackers, so I guess that's my position.

Questioner 18

In the first quarter of fiscal year 2023 FRMO conference call, management mentioned that M2 velocity was low, because government spending is not being picked up in that metric. Could management explain this further?

Murray Stahl – Chairman & Chief Executive Officer

I'm sure I said it. I just don't have those figures in front of me. It requires access to certain figures, and it'd take me a few minutes to figure out where in the databases they are, so I'll try to write something about it in the future and explain it further. The data come from the government; basically, it comes from central bank figures. I'll have to look at that, so I apologize for not being able to answer the question off the cuff.

Thérèse Byars – Corporate Secretary

That was our last question for the day, so I think the only thing to do is to give your closing remarks.

Murray Stahl – Chairman & Chief Executive Officer

Well, once again, thanks, everybody, for a lively question and answer session. I'm delighted to have done it, and of course, we need to reprise this in about 90 days. Thanks so much for your support, and I look forward to getting another round of questions in about three months.

Steven Bregman – President & Chief Financial Officer

Have a good afternoon.

Thérèse Byars – Corporate Secretary

The call has ended, and you may now disconnect. Thank you for joining us.