# [00:00:00.970]

Today we're going to go back in time to the 26 January in the year 1543. Our location is absolutely nowhere, just the middle of nowhere in the middle of the Pacific Ocean. A tiny speck that you'd have to zoom and zoom and zoom in just to find a little tiny island that's a couple of dozen square miles, an area at most. Now, this is a time in history where you've got super powers that are vying for economic dominance over one another. You've got Spain on one hand and Portugal on the other, both of them empires.

# [00:00:33.190]

And they were really at each other's throats trying to figure out who was going to be number one. They were feverishly establishing colonies all over the world trade routes, exploiting natural resources, trying to be number one. The Americas had already been picked apart. Spain was dominant, and the Americas really had the lock. They had colonies and outposts all over the Caribbean and Hispaniola, where modern day Haiti and Dominican Republic are, puerto Rico, cuba.

# [00:00:58.120]

By the 1543, they had vanquished the Aztecs already. We did a podcast about that some weeks ago. They taken Mexico, they'd taken Peru, where they were pulling literal shiploads of gold out of the out of the ground and shipping it off to Spain, flooding Spain with so much gold that they pulled out of Peru. They had Chile, they had Colombia, and not to be entirely left behind, the Portuguese, they had a foothold. They had really a giant landmass in South America that became Brazil.

# [00:01:24.050]

And the Portuguese were also more international. They had taken some outposts and colonies in Africa. They put Zanzibar, India, they'd even taken a spot in Asia where modern day Singapore is located. And again, the competition between the two was fierce. They weren't at war.

# [00:01:40.320]

They didn't have armies marching on the battlefields, shooting at each other, but it was about as vicious as you can imagine today's standards, we think about trade disputes between China and the United States, or if you're old enough to remember, the 1980s, everybody was terrified that the Japanese were going to take over the world. And the Japanese government had all these unfair practices in its business. That's nothing. It's nothing compared to what these guys would do. There is one story, this is actually with the French.

# [00:02:04.490]

The French went and established a small outpost in Florida, in what is today Jacksonville, Florida. And the Spanish didn't care for that so much that they actually just sent a group of guys and slaughtered all the French people that were there, because they said, well, you're not going to go to Jacksonville. So they just slaughtered all the people, all the French people there. It should have been an act of war, but everybody just sort of shrugged their shoulders as well. That's what it is today.

## [00:02:26.910]

That was the sort of stuff that was kind of normal and commonplace. So they used every dirty trick in the book to trip each other up, even including straight up violence. Now, at the time, the big prize for all these guys was Asia. Again, spain had had the Americas locked down. Portugal was getting into India and getting into Africa.

## [00:02:47.570]

Asia was still relatively virgin territory. There wasn't a major European power that had its hooks into Asia yet. And at the same time, it was also a different level of resource. In the Americas, it was all about gold, it was all about silver, and that's what Spain was doing. They had all these mines everywhere and they were just pulling metal out of the ground and shipping it off to Spain.

## [00:03:08.580]

Well, in Asia, it was different. It wasn't about gold and silver, it was about it's about the spice trade. And the spice trade was a really big deal back then. Spices were so important, as they have been for so much of human history. We have a lot of archaeological evidence that even ancient Neolithic humans, people that predated the ancient Greeks, classical Greeks and Mesopotamians, were engaged in the spice trade.

### [00:03:30.700]

This has been with us in humanity for a really long time. And for us, it seems maybe even a little bit silly. Like, why do people make such a big deal about spice? Well, they might come if they could get in a time machine, come into our air, they would say, Why do you make such a big deal about coffee? It's kind of the same thing.

### [00:03:44.130]

All of these people that killed can't function if they don't have their coffee. It was the same thing back then, right? People say, I can't function without my spice. The other thing about spice is and by the way, coffee today is the number two, top two, top three most widely traded commodity in the world. So coffee is a huge deal in global trade.

### [00:04:00.900]

Spice were a big deal back then, but even more importantly, spices were also almost kind of a form of wealth, a bit of a store of value. No trader in the history of the world has ever said, man, how am I going to get rid of all these spices? Right? Nobody had a shipload of spice and couldn't figure out, who am I going to sell this to? Everybody.

### [00:04:19.730]

If you had a lot of spices, you always knew there was a vast market for it and you could probably fetch top dollar for it because they were always in such high demand. And so controlling spices was not only something that you wanted just in terms of just raw consumption, but also something you wanted just for the economic value. And so Asia was where the spices were at. Spain was playing ketchup. Portugal had already had a little bit of a toe hold in in what is today Singapore.

#### [00:04:45.140]

And so, in 1541, the guy who's the Viceroy of New Spain, this is the basically the they're headquartered in Mexico City. This is how far away they were from the Pacific. And they went to the Spanish explorer guy named very Spanish name, ri Lopez de Villa Lobos. And they went to this guy, Villa Lobos, and they said, we want you to go to this island chain in the Pacific. And the island chain is what we know today as the Philippines.

#### [00:05:08.060]

The reason it's called the Philippines is because Villa Lobos did find it. They knew it existed because the Portuguese were there. There were maps and sightings and things like that, so it wasn't like they had never heard of this before. But the reason it's actually called the Philippines is because Villalobos got there and named it after King Philip II of Spain. So they called the Philippines, but on the way, they set sail.

#### [00:05:28.560]

They had this expedition at 1541. They said, you got to go to the Pacific. Said, all right. Took about a year to get the men and the ships and the money and everything, the supplies. Together they set sail from Mexico, from the Pacific shores of Mexico.

## [00:05:41.620]

On November 1, 1542, months went by. They passed through what is today the Marshall Islands and all those different atolls and so forth. And they finally got to, on January 26, 1543, not the Philippines, but a place they'd never seen before. It's an island chain, small island chain, a couple of islands. They said, oh, my God, this isn't on our maps.

#### [00:06:00.840]

We've discovered something new. And they called it the Caroline Islands, after their former king, Charles I, or Carlos the first. They called it Caroline Islands, after Carlos I, king Charles, and of course, naturally said, oh, it's not on our map, therefore we've discovered it. Therefore it belongs to us. And so this little island chains Caroline Islands became Spanish territory, and it remained that way for hundreds of years.

#### [00:06:24.250]

They realized very quickly, oh, my God, there's nothing here. There's nothing but coconut trees, and that's it. There's no economic resources. There's no spices, there's no gold, there's no silver. There's nothing here.

### [00:06:34.140]

Just some natives that don't really care for us very much, so we're just going to leave it alone. And essentially nothing happened there for a really long time. A couple of hundred years later, over time, it was very, very quiet. Eventually it transferred from the Spanish into German hens. The Germans didn't do anything with it, and it doesn't really come up on the international radar until an American guy in 1903 oh three, he shows up.

### [00:06:58.940]

And this is a guy named William Furness. Furnace was actually trained as a physician. Interesting guy. He was a medical doctor. And at a certain point, he said, I don't really like medicine anymore.

### [00:07:07.950]

I want to be an anthropologist. He was always sort of intrigued by cultures and civilizations and travel and all these things. A little bit of Indiana Jones, kind of, because he would travel to all these places and do really exotic things he was known as being, like, one of the most highly tattooed people in the world. You take pictures of his tattoos, and this guy had today people's sleeves and all sorts of things. Dragons and eagles.

### [00:07:33.890]

That was a big deal back then. Nobody had that stuff. But Furnace was all tatted out. And he would travel to places and go to these exotic places and take photos, which nobody did that at the time. This guy had a camera, and he would take photographs of his adventures in the jungles and Borneo, whatever.

#### [00:07:47.980]

Remember, this is 19. Three people are like, man, far out. This is crazy stuff. This tattooed medical doctor going to Borneo taking these wild photos of topless women in grass skirts. People have never seen anything like that before, right?

#### [00:08:03.740]

So this guy, 1903, William Furness. He's in Sydney, Australia and he meets up with his German steamship. And again, at the time, the Caroline Islands. They were technically under German control. Not that the Germans were in control of anything there.

#### [00:08:16.530]

Didn't even matter. So he says, all right, I want to go to this place. I want to go to the Caroline. So he hops on this German steamship and they drop him off. And the captain says, well, we'll be back, like, in a couple of months.

#### [00:08:29.190]

We stop by once every couple of months. We'll be back in a couple of months. If you survive, then we'll pick you up, we'll take you back home. He said, okay, great. So this guy goes, gets off the gets off the boat, goes into the wilderness to meet the natives and takes his life into his hands and has an incredible experience, an incredible adventure.

#### [00:08:46.240]

And he wrote about it extensively. He spent the next several months living there integrating with the local culture, writing about it, learning all their customs, even learning some of the language. And

while technically it's called the Caroline Islands the place that he went to was known then as is still known today as Yap some people call it Yap Island. It's technically, again, four islands, not just one, but it's really small. We're talking about, I think, 30 or 40, like, 100 km<sup>2</sup>.

### [00:09:14.200]

It's really small now. This was a really fascinating culture to furness. He wrote about this extensively. All these things, what they did that were so different than what people were accustomed to in the United States and in the west. They engaged in polyamory.

#### [00:09:28.670]

They engaged in polyandry. You have to look that one up. They engaged in kind of a very formalized, quasiforest quasi voluntary concubinage where they would steal women from other villages keep them in their village for a while as captives. But then at a certain point, they were free to go but the women would actually stay voluntarily. Just all these things that just made people's heads explode.

### [00:09:51.380]

When he wrote about this stuff, they viewed children as property of the community and not as wards of actual parents and couples. But it's like, oh, the whole village is that all our children, every children, every child belongs to everybody. Everybody's, everybody's child. And just things that Furnace thought were so interesting. But one of the things that he thought was really interesting was there he wrote about this.

## [00:10:14.950]

He said, the Yappies have such little hardship. This is an island where you think about Furnace, he was born, I think, in the 18th. I think he was born like the, at the, at the depths of the Civil War, right? So this is a guy, you know, born in the 18 hundreds who, who has sort of grown up imbued with the great American frontier mythology of the frontiersmen going on their covered wagons, braving all the dangers and risks and taking their lives in their hands. And if you build their log cabin, if you screw up, then you're going to freeze to death in the winter, you're going to starve to death.

#### [00:10:46.500]

I mean, they didn't have any of that. And yet he said these people have no natural predators. There's no enemies, there's no snakes, there's no disasters, there's no natural forces, anything that's going to wipe him out. There's no major disease. Food grows everywhere.

#### [00:10:59.390]

He writes this kind of joke, really, how motivated can a man be when all he's got to do is roll out of bed in the morning and shake his breakfast off the tree in the backyard, right? How about, I mean, there's nothing that you really have to do, there's nothing you really have to worry about. And because of this, he said that kind of it's, it's, it's like Garden of Eden stuff, really. It's just this sort of paradise that's so easy. And if you take that level of comfort, that ease of life, and you pair that with the fact that there's no natural resources at all, there's nothing to exploit, essentially, there's no economy here.

#### [00:11:32.120]

And he said, this is the reason why there is no economy. There's no production, there's no industry, there's no technology, there's nothing going on here at all. And people are very happy. They're extremely happy people. They live their lives and everybody's great.

#### [00:11:46.400]

But the thing that really he found, William Furnish found so remarkable is that in spite of having no economy whatsoever, the Yappies had potentially the most highly developed financial system in the world. And he devoted an entire chapter to his book about this. In fact, he was so taken by their system of money, he actually called his work, he called it the island of Stone money. And it got published in an economic journal, not an anthropology journal, an economic journal. Because people were so taken by this idea, because that is what they use, this money.

They use stones, but not just any stones. They're not talking about rocks that you pick up off the ground. You've probably heard of these, these famous Yap island rises or Phi stones, depending on where you are, that these are giant, enormous stones, that it might be several meters in diameter, weigh up to several tons, literally thousands and thousands of pounds. They've got a hole in the middle that's big enough that you're supposed to be able to shove this wooden plank so that if you're strong enough and so inclined, you can actually tilt it on its side and roll it using this wooden plank. And not that most people really did that, but this is the way that they were built.

### [00:12:55.190]

And again, they were huge. And you're talking about Yap being in a place that is so devoid of natural resources, they didn't even have the material, the aggregate stone to make these giant rice stones. They had to go to another island. So they got in their canoes and they paddled quite a long way over to Palau, which I've been to Palau. Palau's got all sorts of very interesting natural resources and quarries and so forth.

### [00:13:18.310]

They have this very special limestone there. You can see it actually to this day. There's part of palau. I flew over this in a helicopter, and there's all these Japanese people that come down and bathe in the waters because of this limestone there, and they think it sort of purifies their skin or whatever. And the people from Yap that would go in their canoes, they would go to Palau quite a long distance to paddle.

### [00:13:39.200]

They would take all the rock they could find, the limestone from the quarry, and they would actually build these stones. They would craft them. And these giant stones, they put them back in their canoes and they paddle back, and they would bring them back and they say, AHA, we have money. And so they would create money that way. That was essentially their monetary system.

#### [00:13:57.100]

And the thing that was, you could imagine any of these stones, all of them are different, right? So you've got some stones that are bigger, some are a little bit smaller, some are made of higher quality limestone, some are more polished. And so the value is sort of based primarily on size, but also on quality. You could think about it like gold, for example. You've got some giant gold bar that's 99.99% pure that's going to be worth more than some little tiny gold bar that's maybe only 90% pure, right?

## [00:14:25.730]

So it's the same thing. And they have a measuring system that they call span. It's three span, five span, ten span. So if you think about a span, if you make like an L shape with your thumb and your index finger, and you look at the distance between the tip of your thumb to the tip of your index finger, that distance between your thumb and your index finger is one span. And so they would think about their Rhystones in terms of span.

#### [00:14:49.750]

So Furness writes in his book, he said, Well, I went around and said, well, how much are these things worth? And they said, well, a three span Rhystone is worth about 1000 coconuts or a small, roughly 100 pound pig. He said, okay, so these are the ways that they actually these are actual pricing that existed in Yap in 1903. Things that make these stones or the sort of monetary system so interesting because we could laugh and go, it's stones. It's silly, but it's actually not.

#### [00:15:17.380]

There's so many things about this that make it extremely effective. Number one is it's a very secure monetary system. Nobody's going to steal these things. Nobody can steal these things. If you can steal these things, it's going to take a crew of guys, so many people that there's no way you're actually going to be able to get away with stealing somebody's rhythm because you got to have a crew of like twelve guys come and pick up these three tonne stones and try and take it somewhere.

You're never going to be able to get away with that. So there's built in intrinsic security and furnace. Wright's mother said there's basically no theft on this island as a result of that. There are no intermediaries whatsoever. There's no banker, there's no banker of the rhy stones who's got to go and you got to go deposit your rhy stones with this guy.

## [00:15:58.210]

Everything is completely decentralized, totally disintermediated. There are no intermediaries whatsoever. There's also a very free market in that there's no central authority saying these are the stones and this is all the stones they're going to be. In theory, anybody that's willing to put in the work can go and create more rice tones. If you want to get in your canoe and go to Palau and mine the limestone and fasten it together and make the stone and then haul it back and row all the way back to Yap, then sure, you can do that.

## [00:16:28.750]

And there's actually this great story of another guy. His name was David O'Keefe. He was an Irish American guy and he's one of these old school from the 18 hundreds swashbuckling entrepreneurs. And he shows up to Yap. The story, it's almost unbelievable.

## [00:16:45.250]

It literally is hard to believe. This guy shipwrecked onto Yap Island and was kind of ingratiated himself into the locals, learned the culture, and he said, you know what? He grabbed a couple of guys. He said, let's go to Palau, let's get in your canoes. Let's go to Palau, let's make some stones.

## [00:17:01.120]

And people said, all right. So they go with this guy, David O'Keefe. They go to Palau, they mine some stones, they lay them out. They actually fashion these rhe stones. They bring them back.

### [00:17:10.480]

This is a foreigner. He's not Yappies, he's a foreigner. And he shows up with these rhythms and says, hey, I have money. And the people go, yeah, okay. So they accepted that.

## [00:17:19.150]

The community accepted it. It wasn't that. There was this fixed sum that said that some guy decided, this is all the money that's ever going to be until the end of time. It was a free market in money. As somebody showed up with some similar rhy stones, people actually accepted that.

#### [00:17:32.430]

Ironically, they actually made a movie about this. You might want to check it out. The guy who plays David O'Keefe this is from the 1950s. So this is like old school Hollywood stuff. Burt Lancaster plays David O'Keefe.

## [00:17:41.720]

They get one of these Hollywood starlets back in the 1940s, 1950s to play his obviously, there's a love interest. He's got this beautiful woman who falls in love with him, and they go and they have these adventures trying to make rhystones I think it's called what's it called? His majesty O'Keefe for something like that, starring Burt Lancaster from, like, 1953, something like that. So if you feel like checking out an old movie this weekend, might check that one out. But so we have extremely secure, totally decentralized, free market.

#### [00:18:10.040]

And it's a credit system, right? So a credit system, unlike a sort of cash and carry system where you've got to go around and back in the old days, when people had gold coins, they had to pay gold coins to one another for every transaction. This is a system where physical possession was not required. You could do a transaction with somebody and say, okay, I'll sell you 1000 coconuts for that three span Rhystone, or, I'll sell you 10,000 coconuts for a 30 span Rhystone. But you know what?

That rhy stone sitting in front of your house. Just keep it there. I don't need to pick it up and move it. I'm too lazy to do that. I'm not interested.

## [00:18:41.800]

That sounds like a lot of work, and my back hurts, right? So just keep it there in front front of your house. But we'll all agree that even though it's in front of your house, it's my stone. People go, okay, yeah, that's fine. And so what they essentially had was this decentralized community balance sheet where people could go around, they knew, like, okay, that stone that belongs to this guy.

## [00:18:59.440]

That stone belongs to that family. These three stones that are in the middle of the jungle right here, they're not even in front of anybody's house. They belong to this other person. And everybody just sort of knew. And there was this essentially distributed decentralized ledger of who owns what and who has what money.

### [00:19:15.440]

And it was all a credit based system because they could do that. They could engage in transactions, and no actual money, no stones would change hands, only the concept of who owned it. And people would essentially update their mental balance sheets of who owned which stone. It was actually quite a very interesting system. The real interesting part and furnace was dumbfounded.

### [00:19:35.740]

He tells this story in his book. It's really, actually wonderful. It's a relatively short read, but he's got a whole chapter devoted to the rhystones. And in the chapter, he talks about how there was one family. And he says that everybody their wealth was undisputed by everybody in the community because everybody knew that they had these giant rhystones, but nobody had ever seen them because supposedly generations before it could have been 100 years prior, there were some guys coming back from palau with these giant rhystones that belonged to this family.

## [00:20:05.910]

And the cance sunk and the rhinestones fell into the ocean, and they were at the bottom of the sea. And what happened was the people that were on that particular voyage, they came back to the island. They went to the village. They said, we had these rhystones. They were like 30 span and really, really great quality.

## [00:20:22.500]

But they fell into the bottom of the ocean, and everybody said, okay, good enough for us. That's fine. You had all these people sort of testify to the size and quality, and they said they belonged to this family. And so even though nobody ever set eyes on those particular rise stones, people just credited that family. And again, their community mental balance sheet, they credited that family with ownership of these giant, beautiful, high quality, huge rhythms.

#### [00:20:47.800]

And furnace said, basically, at first, it seems almost crazy. Like, how could they do that? But he said, well, when you think about it, remember, he lived at a time. This is the early 19 hundreds. The US.

#### [00:20:59.480]

Is still on a precious metal standard. The dollar is actually defined by gold and silver. And furnace says it seems crazy at first when you think about it. But honestly, we do us. Dollar transactions every day.

#### [00:21:12.870]

But I've never seen the gold. I've never seen the silver. I assume that it's there, but I've personally never laid eyes on the silver that's supposedly in the mint. I just believe that it's there. And I go on about my life buying and selling things in US.

[00:21:25.290]

Dollars as if I knew that the money, that the silver was there. That's basically how they do it with the rhystones. And so there are a lot of things, even though they didn't have the technology, they didn't have the know how, they'd never read Adam smith or any of these famous economists. They figured all this stuff out for themselves. And the thing that's actually quite interesting that I really want to point out here furnace says this, and I think this is a really profound statement, and this is a direct quote from his writing that, again, ended up in the journal of economics.

#### [00:21:52.460]

And he said, quote, labor is the true medium of exchange, the true medium of exchange and the true standard of value. He writes this saying again, the yapees, they haven't read any of these. They haven't read Adam Smith. They don't know anything about economics, but they figured this out. They figured out that labor is the true medium of exchange and the true standard of value.

### [00:22:14.350]

What does that actually mean? Well, when you think about it, that's what rise stones actually are. Labor being the true medium of exchange, the true standard of value. Rise stones are essentially proof that there was labor. Labor took place.

## [00:22:27.600]

You don't get that. That stone isn't natural. It doesn't fall from the sky. It doesn't just fall off the mountain. Somebody had to do a lot of work.

### [00:22:35.440]

Somebody had to go and get in their canoe and paddle all the way to Palau and dig that stuff, dig the limestone up and shape it and form it and make these giant disks and poke the hole in the middle, haul it back onto the boat, rode all the way back to to to to Yap. That's a lot of work. And that's essentially what the rhe stone represents. It's proof that there is all this work. There was all this labor, the labor, and not only the labor, the know how, all those things to actually create something.

#### [00:22:59.980]

And that something the product of that labor became the medium of exchange. And this is what he's saying. Labor is the true medium of exchange. And that's really what they're using as a medium exchange, is these rhystones is the product of their labor. The thing that is the result of this labor becomes the medium of exchange.

## [00:23:17.670]

Now, if you're into crypto at all, you might be thinking, well, that sounds a lot like proof of work. And it does, because it's really what it is. That's one of the underpinning philosophies behind Bitcoin, the original algorithm, this idea of proof of work, this is one of the they call this a consensus algorithm proof of work. This is why Bitcoin miners essentially perform all these complex calculations, do all these things, and people go, well, there's no point to doing that. There's no intrinsic value, et cetera.

#### [00:23:42.080]

Well, there's no intrinsic value to most money. There's no intrinsic value to most currencies most medium of exchange, but it is, by definition, proof of work, because it is doing work regardless of there's actually any intrinsic value associated with it or not. People can debate whether or not the intrinsic value is important. But I just want to point out that this is really the hundreds of years, if not thousands of years. People believe that.

#### [00:24:07.260]

Researchers think that Yap Island was originally inhabited as early as 1500 BC. So whenever they started with these ridestones, I could go back a really long way. They realized that proof of work was actually a really powerful way to translate value, to be a measure of value in a medium of exchange. Now, I have a slightly more nuanced view on this idea. Instead of instead of saying proof of work, I see it as proof of time.

And the reason I think that's important is because time is the ultimate scarce resource. Time is the most valuable commodity in our existence. No one can make any more. Of it. There is no central banker that can say, let there be time.

#### [00:24:44.480]

They can say, let there be money, let there be fiat, let there be interest rates, let there be all these things. They cannot make any more time. No politician, no king, no emperor, no president, no central banker can create any more time. And once it is used, it is gone forever. Once it is consumed, it is gone forever.

### [00:24:59.060]

In whatever way we choose to do that, whether it's through work or recreation or whatever, once it is used, it is gone forever. How it is used definitely has a major impact on our lives. And people use time for destructive purposes, wars and things like that. It has a pretty bad impact on humanity. But in aggregate, if you think about, let's say right now there's 8 billion people in the world.

### [00:25:23.290]

That's roughly true, according to what the demographics tells us, 8 billion people. So literally, over the next 60 seconds, the next 60 seconds, you could say there's 8 billion people minutes, right, or man minutes available. 8 billion people minutes, literally, as I say this right now, for the next 60 seconds, 8 billion people minutes available. And so those 8 billion people minutes will come and go. They will be used and consumed or not used or wasted or whatever it is, and they'll be gone forever until the end of time, whether people are at work or they're at sleep or they're at recreation or whatever it is.

### [00:25:54.160]

And sure, we have technology that's available to us that makes us more efficient with our time, makes us more productive. So we do have the ability to do more. We can do more work in an hour than we used to be able to do, but that 1 hour is still the only hour that we have. And once it's gone, it's gone forever. And this is one of the reasons why I think this concept of time time is really the valuable, scarce, universal, equal currency and everything else.

#### [00:26:21.690]

And why it makes actually a lot of sense to view that through that lens. And why I personally find assets that essentially convey time proof of time in ways that are really durable. I think those do tend to make a lot of sense. And gold is really a great example. Gold is a great example because if you think about gold, let's think about a popular coin like Canadian maple leaf, right?

#### [00:26:46.790]

So you have different coins of American eagles and buffalo coins and all these different things. Chinese panda coins. Well, in Canada they have these things called maple leaf coins. And so a maple leaf coin that's made from one troy ounce of gold, and that was a troy ounce of gold that was mined and refined and minted. This year, that coin is going to be worth exactly the same as a coin that is made from the same one troy ounce of gold.

#### [00:27:12.950]

That was mined will be mined and refined and minted ten years from now, right? So you have a coin today, it's going to be worth exactly the same as a coin ten years from now. That's not really that common, right? You can take whatever, a microchip in your laptop not going to be worth the same as a microchip that's made ten years from now. There's so many things that are not going to be worth the same as something else that's made ten years from now.

#### [00:27:37.110]

There's a lot of assets that even when they appreciate, like real estate, like homes, for example, homes do appreciate, but they also depreciate, right? Because you've got all the materials and so forth, that the roof needs to be replaced over time, and the siding needs to be, the deck needs to be redo, all these things that need to need to happen, it requires a lot of maintenance. And if that maintenance isn't being done, then the property itself loses value and it's not going to be as valuable

as something that's made brands banking new. But gold is going to be where a gold coin today is going to be worth exactly the same as that similar gold coin ten years from now. That's very interesting.

### [00:28:13.280]

That's very, very interesting. Because when you think about through this lens of proof of time, gold does have natural scarcity through the lens of proof of time it took, and this again goes back to even ancient civilizations. You think about the Romans and the Greeks, it took a lot of labor, a lot of labor, a lot of man hours to explore and develop and mine and refine and mint a single coin took a lot of time. And so holding that gold coin was the equivalent of holding all of that labor in your hand. It's the same way that if you had bushels and bushels of grain, wheat and corn and so forth, well, that wheat and that corn was also the product of labor.

### [00:28:54.430]

It's a lot of labor. It's a lot of manhours that people have to plant and maintain and harvest and thresh and all these things. And you have all this grain as a result. The difference is, is that gold will last forever, right? The wheat doesn't, the wheat is eventually going to rot, it's going to be consumed, but the gold lasts forever.

## [00:29:09.160]

So it's like taking all the labor. Gold basically means you're taking all that labor, of all the labor that it took to again explore the mind, develop the mind, actually pull the gold out of the ground and mine it, refine it, turn it into something, mint it into a coin. All the labor, all the effort, the know how, the technical expertise, the investment in technology, all of that, all that time and effort goes into that gold coin and you've got it in the palm of your hand and it lasts forever. You're freezing in time essentially all of the time that it took to make that gold. And that's a very interesting concept.

## [00:29:42.000]

It's freezing all of that time and holding it in your hand, and that lasting forever. And I'm going to come back to why that matters and why that actually makes such a good inflation hedge. The other part about that and and the the lens through which I would encourage you to look at this is also it's freezing in time, a minor's gross profit, which is really interesting. And if you're not sure what that means, it's a fairly simple concept, gross profit. This is the case with anything.

## [00:30:09.810]

But I'm going to talk about with minors in particular, miners, obviously, like any business, gold miners, oil producer or legal business, you're a law firm, it doesn't matter. Everybody has cost. You've got labor, you've got energy costs. If you're some a lot of businesses that produce things have equipment cost. They have to get tractors and giant machines or whatever it is.

## [00:30:31.710]

They've got all these things that those are all costs. And all that, together with miners, they have a cost of production. How much does it actually cost them to produce an ounce of gold? Right? Well, every company generally kind of reports on that differently.

#### [00:30:47.300]

The industry has tried to standardize that. They have something they called AISC. That's the all in sustained cost. It's basically how much does it cost you to produce an ounce of gold? Well, that cost has been going up some of the biggest ones in the world.

## [00:31:00.050]

So you've got Newmont, for example, huge mining company. They're all in. Sustained cost is now \$1,271 per ounce, one \$271 per ounce. That's up from \$1,120 an ounce in the prior year. So that's about a 13% increase just in the prior year.

## [00:31:17.660]

That's their production cost. How much does it cost them to pull 1oz of gold out of the ground? One

\$271, up from one \$120 last year. That's a 13% increase. Then you've got Barrick gold.

## [00:31:29.910]

Barrack Gold is at one \$269 per ounce. So more or less the same as Newmont. That's up from \$1,034 same time last year. That's a 22% increase. So that shows you these costs can and do increase.

## [00:31:43.960]

These guys are just as susceptible to inflation as any other business as any other person in the world, and these costs are going up. So I mentioned earlier profit margin. What does that actually mean, if you're not familiar? Profit margin. Gross profit margin specifically is essentially the difference between their revenue and their actual cost for that particular ounce.

## [00:32:05.520]

So, for example, Barrett Gold. I use Barrett Gold as an example. A year ago, remember, I said their cost was \$1,034 an ounce? Well, the price of gold they were getting on average was \$1,771 per ounce. So they're getting \$1,771 per ounce in revenue.

### [00:32:21.910]

They were spending \$1,034 per ounce to pull that individual ounce of gold out of the ground. So the difference between the two. Their gross profit was \$737 an ounce. That's pretty good. Well, this year, the price of gold is actually for barrick what they've been getting.

## [00:32:37.730]

This goes back to, by the way, Q three of 2022. They haven't released their latest numbers yet, but then Q three of 2022. The gold price per ounce they were getting was pretty much the same as the year before. But remember, their cost went up by 22%. So their gross profit fell from \$737 an ounce to just \$453 an ounce.

### [00:32:57.340]

So you have their gross profit margins falling. Means they're making less money on every ounce of gold. Think about it like a pie, right? When you're spending \$1,500 an ounce for gold, there's a portion of that that's basically there's the cost of producing that ounce of gold and then there's the profit for the producer, right? Because as a consumer, you're paying for all of that.

## [00:33:24.450]

You're paying for the cost and you're paying for the profit. So when you think about it, if you're going to buy something, it's sort of a better deal for you if you can buy something where the producer's profit is low, right, you're getting a better deal. You're getting a better deal if you can buy something at a time where basically there's more of the pie for you and less the pie for the producer. So the way you do that is when the gross profit margins are low. And right now we see gross profit margins are actually falling, which means essentially that consumers today, people that buy gold, are getting a larger slice of that pie than the gold miners.

## [00:33:58.550]

That's usually a pretty good time that you would want to buy. The other thing about that, that is important to know about gold in particular, I think a lot of commodities. This is really important thing to understand is that when profits fall, especially gross profits fall, margins fall, it has a longer term impact on supply. When profits are thin, gross profit margins are falling. Producers aren't really doing backflips about the market.

## [00:34:25.410]

They're not going to like, oh man, we're making so much money. Well, you're not making as much money because your gross profits are actually falling. Your costs are going up, but your commodity price isn't really going anywhere, so you're not making as much money. So they're not going to be especially excited about going out and doing new mines. They're not going to be excited about going out and doing new mine, spending all that.

# [00:34:44.270]

But it's like, why did we spend all this money on developing a new mine when we're just not going to get that much money for it? Our profit is too low. They get all excited about developing new minds when their profit is really high. When gross profit margins go up, they go, oh my God, we got to develop more mines, right? The thing is, developing mines takes a long time.

# [00:35:02.020]

It takes a long, long time, years in some cases, to develop a mine. And so actually, the smart ones will actually go out and do the mind development at a time when gross profits are actually low, because nobody's really interested in doing that. That means when a couple of years go by and gross profit margins have corrected, now gross profit margins are high because these things are all very cyclical. Now suddenly, hey, I got a new mine going, and you hit it at exactly the right time. So this is something that does have a longer term impact on supply.

## [00:35:29.920]

When they're not investing in new supply, when they're not investing in new mines. What that basically means is that a couple of years from now, the mines that they're mining today are going to be exhausted and they're not going to have any new supply to replace that. So now you've got in the future, less supply, right, which means what? Prices are going to go up. So when gross profit margins are low, it usually means it's going to be in the future, probably less supply is going to be a little bit of a squeeze on supply because there's not as much incentive for them to go out and develop these mines and do the exploration and basically create future supply.

## [00:36:01.670]

So that ends up creating an effect on that future supply, makes you supply lower and creates a situation where we can see gold prices go a lot higher. That's kind of where we are today. Now, all that said, I'm not here to talk about gold or you should buy gold or anything like that. In fact, I would think gold is not actually a screaming buy right now. I think it's okay.

## [00:36:21.290]

It's not below the cost of production. I think that's an important way to look at it. Gold to me would be a screaming buy if it were trading below \$1,300 an ounce. If you look at these all in sustained cost, you look at Barrett Gold, for example, and they say, we're producing gold at \$1,269 an ounce. Well, if I can buy gold for 1250, that means that Barrack is losing money.

## [00:36:42.270]

That's the case. You want to buy that all day long. That makes a lot of sense. That would make gold is screaming by. And I think it makes sense to consider that way of thinking about it for really any commodity, I think, and even different businesses in general that produce things.

## [00:36:55.480]

When prices in certain commodities get so low that a company begins losing money, their gross profit is low, they lose money on every sale. That's actually a pretty good opportunity as an investor to consider at least buying. There are a lot of other things to factor in. But looking at something in absolute terms, being below commodity price, being below the cost of production, makes a lot of sense. You could look at that as well.

## [00:37:19.610]

Even with things like real estate, real estate in different places around the world sometimes gets so cheap that literally, you've got a house that's selling for less than the cost of construction. You know, that's a great deal. If you can buy a, you know, whatever, four bedroom home for \$200,000, and it turns out it would cost you \$300,000 to build that house from scratch, and you can buy it for \$200,000, that's a great deal, right? So when you buy something for less than it's essentially replacement cost less than its production cost, that's usually an indication that it's at least worth paying attention, doing a lot more research. It also kind of makes sense to consider buying things when margins are low, when those gross profit margins are low, because what you're essentially doing is freezing all of that in time.

# [00:38:01.120]

You're freezing all that in time. You're freezing in time and time now where margins are low, because these things are cyclical. They go down, and then they go back up. And when margins are low now, usually that means margins go up again in the future. It's very cyclical.

## [00:38:13.850]

It gives you an opportunity to make a lot more money. So I would encourage you to again, this is not certainly no recommendation, I think, to buy gold right now. I think, again, it's not a screaming deal. It's not below the cost of production. Margins are low, but they have been lower in the past.

### [00:38:27.170]

So these aren't like rock bottom, low gross profit margins. There is a lot of upside. I think, to be honest, one of the big factors that drives gold prices. There are a lot of factors that drive gold prices in the short term. It's always about supply and demand, and a lot of things about supply that a lot of people don't realize about gold.

### [00:38:42.510]

You may be surprised to learn, for example, that one of the major, a major factor in gold demand is actually from, from farmers in rural India. This is a traditional thing among farmers in rural India. They take their profits from the, from the agricultural harvest, and they buy gold because it's something they understand. They don't have access to most banking services and things like that. So they buy gold because it's a trustworthy store of value.

## [00:39:08.910]

There could be a bad monsoon, wipes out a lot of gold demand and all these sorts of things. That bizarre nuances. It's also central banks. If central banks dip in and they want to buy lots of gold, that's obviously going to have a major impact on price. If central banks are selling gold, that's going to have a major impact on price.

## [00:39:26.100]

And those things can vary significantly month to month, year to year. I think there is a lot of upside, frankly, in central bank demand. I think we're seeing conflict is usually very good for gold, global conflict. And you've got now all these sanctions and things like that. And so it makes sense for countries to consider central banks and their official reserve positions owning gold.

## [00:39:47.380]

And I think there's potentially a lot of upside there, but there's also downside, I think, in the gold price. And it's important to recognize if Vladimir Putin has a heart attack tomorrow morning, the war ends. That's probably not going to be great for the price of gold. I think a lot of traders will just reactively sell gold and we'll probably see the price go down and a lot of things like that. So there's upside, there's downside, there's all sorts of different factors.

## [00:40:11.550]

Margins are low, they have been lower. The price is reasonable, but it's not below the cost of production. So it's not a screaming buy to me if the goal is I want to buy for X and sell for higher than X at some point down the road. And all this is really to say it's not really about gold, but just a way that I would encourage you to think about things, especially when we're talking about commodities, especially good inflation hedges. Proof of time I think is a very powerful concept.

## [00:40:39.000]

And the idea being is there an asset that is durable, that is transferable, that's efficiently? securable something that I can actually transfer this time that went into something, whether or not it has intrinsic value this time and that time will freeze in time. All the labor and all the effort that went into that, that's something that actually that's the stuff of very good inflation. Hedges and Gold is just one example of that. And there's a lot of people say, oh, this is impossible to value gold because you can't do discounted future cash flow methods and you can't do all these complex mathematical models.

## [00:41:15.520]

Well, actually you can value gold. You can value gold because we know exactly what the production costs are, we know exactly what gross profit margins are, and so that makes it a lot easier. There are metrics to value that. And I think it's important if you look at these things in terms of being a long term inflation hedge, why it's a long term inflation hedge. If you think about that concept of freezing in time, like all the labor costs and so forth, if labor costs go up in the future and you've frozen in time labor costs from the past, well then naturally that frozen time cost is going to appreciate in value to be commensurate with the labor because the labor is going to be the same.

### [00:41:50.450]

So those labor costs are going to go up, so the value of the gold that you hold is going to go up. And those are sorts of things, I think, that make very good inflation hedges when you can freeze labor in time, you can actually freeze time itself. It makes a lot of sense. And if you could look at it through a lens of production costs, look at it through a lens of gross profit margins and so forth. You can see, oh, I can freeze this labor in time.

### [00:42:14.520]

I can freeze time itself. And I can do it at a point where I get the biggest slice of the pie. The producers are even losing money on it, and all the financial benefit from this commodity, it actually ends up in my pocket. As the investor, as the consumer, that makes a lot of sense. And I think it makes a lot of sense to view many other assets and commodities through that lens.

### [00:42:34.380]

You can look at real estate through that lens, you can even look at business through that lens. Cost production, gross margins, freezing in time, certain elements. And that's I think we can come up with some very, very good ideas for an inflation hedge. So speaking of time, I think that's probably it. I'm out of it for this week, so I want to thank you for giving me some of yours, and we'll speak to you again soon.