Episode 798: How the Disasters of Venezuelan Socialism Have Been a Boon for Bitcoin

Guest: Jim Epstein

WOODS: What an interesting and unique article you had on Venezuela. I just told people I'm going to link to it on the show notes page. I mean, I think a lot of listeners know what bitcoin is, although we are going to have to review that, but to see how it's being used in this particular situation and the interesting wrinkle of the price controls on electricity and how that factors into the profitability of bitcoin mining, wow. I mean, a lot of times I read articles online, and I feel like, Yeah, I've read this one a million times. I know free trade is beneficial — you know, over and over and over. But this was something new. I really learned something in your piece.

So I guess we do have to start with some overview of bitcoin. I've done a number of episodes on bitcoin, and I feel like I can sort of explain it as long as people have absolutely no follow-up questions, so can you try and handle it, and then try to explain what bitcoin mining is?

EPSTEIN: I'll do my best. It gets complicated fast. But I think the best sort of way to think about bitcoin is that it's a currency system that runs on the Internet. When you send someone money, it doesn't route through the traditional financial system, as does every other form of digital currency. It's almost like cash, but it's digital. So you don't need a third party: you don't need a bank, you don't need a central bank, you don't need a government to validate and say that it's okay to make a transaction. It is just — It's almost digital currency that has a physical property, but it doesn't. It actually moves like email, so you can send something across the world instantly through bitcoin. And then as a result, the transaction costs are very, very low, so you can send someone a 1/100th of a penny, and that actually makes sense in the way that it doesn't with a credit card transaction.

And so this system, it's being run through this really brilliant decentralized computer system that's all over the world, so it's not controlled by any government or any company. It's controlled by these software protocols that are running on computers that are literally all over the world, and the people that are running this system, sort of the analogy to the backend of your bank — You know, if your bank is run on some central servers in Delaware, the analogy is that all of these participants in this network — and we call them, part of them are "miners," is the word, probably not the best word, but that's what you call them. They're running the ledger. They're keeping track. They're keeping a copy of this ledger, which says who has what money and who paid whom what.

And they're also securing it. They're making it so that you can't attack this network easily and steal money. And the way they do that, it gets very complicated; I'm going to try to be as simple as possible. But basically they're running high-speed computations on this network that are constantly sort of securing and validating and building on this database that's known as the block chain.

In effect, what this also means is that what they're doing is they're taking electricity, and they're turning it into money. And that's because to be a miner, to participate in this network, which absolutely anyone can do if they want, it's very energy intensive. You burn through a lot of power. And I've seen bitcoin miners who are literally using the heat from their computers to heat their offices, because they're looking for little ways to squeeze out value. So in many places in the world, to bitcoin mine you're going to use more electricity than you're going to earn in bitcoin, and so that investment, that sort of investment of electricity is also what's securing the network and makes it hard to attack.

WOODS: So this is what also — this is what I find so interesting here. When you say that bitcoin users are turning socialism against itself, that is to say that they're exploiting this socialist-style price control on electricity to make profitable what might not otherwise be profitable, namely bitcoin mining, and in so doing they're also facilitating and presumably, people are getting to know a little bit better, the whole system of bitcoin, which in one way or another does I think help to undermine the state.

All right, so I see how the electricity thing plays into this, but how many average people in Venezuela even now know about bitcoin? Is it a significant story?

EPSTEIN: Well, you know, it is. It's middle class people mostly. You need a little bit of computer savvy. But what's exciting is that it's growing. It's growing really fast. And it gives us a picture — You know, in the United States bitcoin, the industry's growing. Banks are getting very interested in using this underlying technology to transfer money from one bank to another in a more efficient way. It's sort of been corporatized. It's been taken over by the traditional financial system, so that's not so exciting.

What is exciting in Venezuela, and this is also happening to some degree in Argentina and in Brazil, these countries where inflation is an enormous problem. The Venezuela bolivar is now worth about — one bolivar is about 1/140th of a penny on the real free market. So the government has completely wrecked the currency there, so we're seeing bitcoin has an enormous potential to really give people an alternative to the government-run financial system and hyperinflation environment. So that's what we're seeing.

So the mining story, because the government effectively isn't charging for electricity, what I write in my piece is a bitcoin miner, you can get one of these machines set up — and it's a little dangerous, and we can get into that if you want. You've got to watch out for the secret police. A lot of people are hiding them in soundproof rooms, in their bedrooms. I spoke to people who are putting them in industrial zones where people won't notice or in poorer areas of Caracas, where the police won't come looking.

So if you can do this and if you take this risk to get these bitcoin miners set up, you effectively have like the closest thing to a printing press that's not run by the government. You're generating — you're accumulating bitcoins, because what I didn't talk about with mining — So you're awarded in new coins. So the more of these machines you can set up, the more currency you have.

And then once this is in the hands — this is creating liquidity for bitcoin in Venezuela, and quickly Venezuelans who aren't necessarily libertarians are realizing, Wow, I can do things with this money that I couldn't otherwise do, that I can't do with my bolivars. For example, I can spend it and order food from Amazon.com or Walmart. And this is happening. I spoke to a guy who runs a computer repair store, and he can't get the supplies he needs anymore into the country to repair computers, and that's because of these government currency controls. Effectively in 2003, Hugo Chavez set a fixed exchange rate between the bolivar and the dollar, and it's now about 660 bolivars for 1 dollar, while the free market rate is over 4,000. So as a result, any economist will understand that means that nobody will buy bolivars through this system.

So bitcoin becomes a way of routing around the government, and if you look at the volume on the big bitcoin exchange in Venezuela and then another site called Local Bitcoins, it's small, but it's growing really fast. And to me it's just a great libertarian story of people routing around government using this incredible technology that there's ultimately, practically nothing that the government in Venezuela can do to stop.

WOODS: Something you just said got my attention: when you said that people have to be careful to do this in secret, because they might wind up getting in trouble. Do you mean to say that bitcoin is already enough of a problem for the Venezuelan government that it's on their radar?

EPSTEIN: Well, in my piece I detail there've been a few examples — there have been many more examples, but the ones that have been high — There have been a few high profile examples of people who have been arrested. I profile a guy named Joel Padron, who was a bitcoin miner in Venezuela. He actually ran a courier service that was really struggling, and he realized that if he used his office that was in an industrial zone and bought from China a few of these bitcoin miners and started setting them up, he could start to pay his bills again. So he started doing that, and ultimately the secret police discovered him, brought him up on charges of electricity theft, and —

WOODS: Ah, okay.

EPSTEIN: Yeah, so this is sort of textbook socialism. You're giving it away for free, but what are these miners doing? They're taking, they're arbitraging this free resource, and then lining their own pockets. I mean, some of the more entrepreneurial ones are doing it on an enormous scale. So the government says we're going to set the price of electricity very low, but if you use it for things that we don't like then we're going to arrest you.

But there's more to the story too. Ultimately — and this gets to the fact of how difficult it is for the government to stop this phenomenon — what's happening is the secret police are coming in and discovering miners after these high-profile arrests and saying, Hey, look at what happened here. Pay us off a little bit every month. So it's

extortion. A lot of miners, once discovered, they won't go to jail; what they'll do is they'll just have to pay tribute to the police, who are getting into bitcoin mining as well.

I mean, Joel Padron told me his bitcoin miners were confiscated by the police. A few months later he got an email. The software is set up so that once one of these computers goes online, he would get an automatically generated email. He got an email that his miners were back online. So these secret police had taken these miners, confiscated them, and were mining themselves now. So they're living in the same socialist hell that the miners are living in, so that's another reason why it's ultimately very difficult for the government to stop this thing.

WOODS: Let me read just one paragraph from your article as an example of somebody who benefits from bitcoin in a really important way.

You write, "Ricardo, a 30-year-old photography teacher, is earning about $500 in monthly revenue with a rack of five mining computers hidden in a soundproofed room of his family's two-story house. His mother has chronic liver disease, and the medication she needs to stay alive is no longer sold in Venezuela. With bitcoins, he's able to purchase the drug from foreign suppliers. 'Bitcoin,' he says, 'is our only hope nowadays to survive.'"

Wow.

EPSTEIN: Yeah, and I'll mention Ricardo is a pseudonym, because again, some of these miners were interviewed on condition of anonymity because obviously they don't want to get in trouble.

WOODS: Right.

EPSTEIN: But yes, that's — I mean, medicine is another great example. There's a secret Facebook group, which I talk about in my piece as well — meaning that it's not listed anywhere and you need an invite to get in — and there are people in that Facebook group who are living in other countries, and they'll get you the medicine you need, and you can pay them in bitcoin. And again, you can't do that. If you're lucky enough to have a U.S. bank account and have a supply of dollars, then you can do that. But that's increasingly rare. So bitcoin makes that possible in a way you cannot do with Venezuelan bolivars, because no foreign company is going to accept your money anymore, because it has to go through that traditional financial system, and that traditional financial system has to abide by this fictitious exchange rate.

WOODS: I know I'm probably being nitpicky here, not with regard to you but with regard to people in Venezuela, but I just can't help myself. You quote somebody in the article as saying that most bitcoin users in Venezuela are not libertarians. And that's fine. I'm glad to see them using it; it doesn't really matter what their ideology is.

But it surprises me that they wouldn't develop into libertarians, given that the thing that they're so devoted to is hated by governments and is cracked down on, and they have to operate in secret half the time. How come they don't see that? Like for the same reason I had Adam Haman on the show, who plays poker, and he told me the

gambling community is 99% left liberal interventionists. And I said, But the government has totally destroyed their livelihood; why does this not — ? And their answer is, Well, you know, maybe it should be regulated. What's the matter with these people?

EPSTEIN: Well, that actually makes me quite optimistic, the fact that they're not libertarians, because in these early days of bitcoin most of the users and the nutcases, the people who just think about bitcoin for half their day, they are libertarians or they're —

WOODS: That is — You're about to make an excellent point. I already see where you're going. Go ahead.

EPSTEIN: Or they're computer nerds, they're hackers, etc. They're cypher punks. In order for this technology to really start to make an impact, it has to almost be ideologically neutral —

WOODS: Yeah.

EPSTEIN: — not in the protocol, but in what draws people to it. It has to survive on its own merits, and it has to catch on on its own merits. And in that sense, it has to be practical, so it can't just be, Well, bitcoin is ten times as hard to use as PayPal, but I'm a libertarian, so I'm going to take those ten extra steps. Your grandmother needs to be able to use bitcoin. It needs to be as easy as swiping your Visa card or using your Apple Pay. And we're moving there fast, but that is the sign of success.

WOODS: Boy, that is such a great answer, because of course the traditional way to make fun of bitcoin in the U.S. is to say it's just a plaything of libertarian geeks in their parents' basement. That's what they say. And so here I am complaining about the exact opposite (laughing). All right, good.

Let's — I mean, this is such an in-depth piece here. Gosh, there's so much to talk about in it. Okay, so we've talked about mining, the electricity question, the secrecy, the ways that people are using bitcoin where they're able to get things that they can't get otherwise. What am I missing here? What other key points should we talk about?

EPSTEIN: Well, you know, I wanted to make this point that it's not only in Venezuela; it's also in Brazil as well, and I have a video out that, I went to Brazil a few months ago, and I interviewed and did some reporting on a bunch of bitcoin startups there.

And it's the same idea in Brazil. Now, Brazil luckily does not have the level of hyperinflation that we're seeing in Venezuela. Inflation is a problem there for sure. What they have is they have an import tax that goes up to about 60%, and you know, when the iPhone 6 came out it was a joke in Brazil, because the iPhone 6 was about $2,000. And you know, it's these failed economic, sort of the infant industries idea, the idea that if we keep foreign goods out of Brazil, Apple will set up factories in Brazil. And as a result, that actually doesn't happen, and to buy a car in Brazil is incredibly expensive. So Brazilian consumers are really suffering because of this.

Well, the way — Bitcoin, again, is catching on in Brazil, because it's offering a way to route around the traditional financial system. It's sort of the same idea. So

in Venezuela we have currency controls where there's this fixed exchange rate, so no one wants your garbage money based on these fixed exchange rates.

In Brazil, it's that you want to route around the tariff, so what you can do — and there are many companies that are now doing this. You come to the United States and you buy Apple laptops for your company. You pay half through the traditional financial system; you wire the money, and then you have something to show at customs. So you pay the 60% tax on that half that you paid. Then you pay the remainder through Foxbit, which is the big bitcoin exchange, and the government has no idea about it. So you've just cut your tax burden in half. Again, these are not libertarians necessarily who are doing this; they're people that are saving money.

So it's just another example of how you can't — Latin America in particular has just struggled to cast off these terrible ideas that have caused so much human suffering in the 20th and 21st century in this region, and bitcoin shows us a way that technology can just make it happen without having to convince government or voters that this is necessary.

WOODS: Now, that's sort of what I thought about bitcoin for a while, and then in the U.S. — and I don't expect you to know all the ins and outs of all this stuff. It's hard to follow. But there was some IRS ruling regarding the nature of bitcoin, and they're suggesting that if you're holding bitcoin and then you either get rid of it or you get some more, and there's a difference between the value of the bitcoin when you got it and the value of the bitcoin when you spent it, then there's some capital gain associated with that that you have to keep records on and be taxed on. If that were actually enforced, that would paralyze bitcoin, wouldn't it?

EPSTEIN: Well, no, it wouldn't. So yes, the IRS is actually going after Coinbase, which is a great company and one of the big bitcoin exchanges. But it's important to remember that a company like Coinbase is essentially, it's grafting on an Old World financial model, where you have a central exchange. Coinbase is holding a bunch of money, and when you buy money through Coinbase you're working through Coinbase, and then Coinbase interacts with this decentralized bitcoin network on your behalf. So Coinbase becomes — it's always been the — and this is true with Internet gambling. The government is always looking to go after a big company, because first of all they make great villains. They give you an entity that you can sure. And it's a chokepoint. It makes it possible.

Bitcoin, however, used in the way it was originally intended, is a completely decentralized system where there's very little way for the government to even know what bitcoin you're holding. The bitcoins that you're holding could be just printed out an a sheet of paper as strings of numbers and letters that are your code. So when it's truly decentralized, bitcoin even here in the United States becomes very difficult for the government to track or control, and the reason why we still have Coinbase is because that decentralized architecture is not fully developed yet. It's not easy enough to use.

I'm a bitcoin user. I own a small amount of bitcoin. I use Coinbase. I don't want to deal with — You know, I might lose that sheet of paper, or someone might hack into my file

that has the codes that allow me to retrieve my bitcoin. I want the ease of using a Coinbase. That's still true. I don't think that will always be true.

WOODS: Let me ask you a question that's sort of unrelated to what we've been talking about up to now. When people talk about bitcoin and they start explaining it to you, the word "blockchain" comes up, and they talk to you as if you know what the blockchain is. First of all, explain what that means, and then secondly, I've heard from a number of people that there are other applications of the blockchain apart from bitcoin. Are you able to go into that?

EPSTEIN: Absolutely. Now, again, to cut back to what we were saying before, the sign of bitcoin's success is you're going to be able to use it without knowing what the word blockchain means, because it gets rather confusing. But in a nutshell, the blockchain simply refers to this database that undergirds the bitcoin network. So it's a database that, it's this brilliant architecture of a database that allows you to trade currency, to trade value and have it recorded into this database. But the database can be spread out everywhere. It doesn't have to be controlled by anybody, and it's very, very difficult to hack or to break. So this idea of a central database that can track transactions has very profound implications that have very little to do with currency. So the idea is that you can trade without a central clearing house, without a third party to kind of validate and say, okay, this person paid this person, and this transaction is complete.

So what developers have started to do is build on this idea of the blockchain, and the most interesting experiments I think are putting land records onto the blockchain — this database of who owns what land. And again, it's something that in the United States we do a pretty good job of. Most local governments keep track of who owns what property, and there's very rarely fraud or theft in that system. In Latin America it's an enormous problem. In Honduras, for example, the land records were kept in these dusty old books in the basement of a government office, and someone could just walk in there, cross out someone's name and put another name in. And it would create uncertainty, and it's something that — As many of your listeners will know, the Peruvian economist Hernando de Soto is the person who has written most about this, how insecure land titles, they really stifle economic development and prosperity, and this is a big problem in Latin America.

Well, in the Republic of Georgia there's already an experiment going, the government is working on putting these land titles onto the blockchain. In Honduras as well — it's now stalled, but an Austin-based company called Factom was close to a deal to put these Honduran land records onto the blockchain. And this means that everyone can see them, and they're totally transparent, and it's sort of eliminates fraud. And what it does is it gives trust to these societies that government isn't giving it. I think it was the historian Sam Bass Warner who said the most important function of government is to keep track of who owns what land, and we haven't had a market way to do that. We probably have, but this is sort of a great way to take that function away from government and to actually do it well.

WOODS: Isn't that interesting, that that is as people think one of the most important functions of government, and yet one of the points of Hernando de Soto's book is that it's done such a terrible job of it, particularly in the developing world, that it's

stifled entrepreneurial activity, because nobody can be certain of the legitimacy of titles. And so the market has to come to the rescue to perform a government function.

EPSTEIN: In this video I made, I profiled this fascinating Brazilian-based entrepreneur named Edilson Osório. He has a company where he is putting notaries, the notary onto the blockchain. So in Brazil — You know, Brazil I think was 122nd in the 2016 freedom ranking in terms of its economy. It's really just a terrible place to do business. It's very hard to start a company. And one of the reasons is is because when you want to do anything you have to go through a notary service. You have to go and sit in line and they check your signature and make sure that your contract or that your birth certificate is valid, etc., so it really slows things down, and this is a real drag on the Brazilian economy.

So what his vision is is that using the blockchain you can totally replace notaries. You can upload, say, a version of a digital representation of your birth certificate to this decentralized network, and then it exists there and it's timestamped, so it existed at a point in time. You can prove it, and then any time anyone wants to validate and prove that your birth certificate is real, they can check it against the original record, this public database that nobody can alter.

These concepts get kind of confusing and difficult, but again, the basic idea is a database that nobody controls that can't be altered or falsified in any way that you can refer to, and this takes away, this kind of backbone of trust can really replace a lot of the functions that government does so poorly.

WOODS: Well, it's all very interesting, and I'm glad we have people like you who can try and explain it for the laymen, getting rid of the stuff that's not necessary for us to try to understand but just to convey the general principles, because this does sound interesting. Even people who aren't interested in bitcoin nevertheless can appreciate the merits and additional applications of the technology. Well, Jim, as I say I'm going to link to your article. I want people the check it out: TomWoods.com/798. And we'll get your — You're on Twitter, aren't you?

EPSTEIN: I'm on Twitter; there's also I mentioned a video too, which gets into Venezuela and Brazil, which you can find at our YouTube channel at *Reason*. Also on our *Reason* podcast, I also did a long interview with Rodrigo Souza, who's a fascinating entrepreneur who runs the big bitcoin exchange in Venezuela and Brazil, if you're interested and want to get more in depth into these issues.

WOODS: That all sounds great. Thanks so much, Jim.

EPSTEIN: Thank you, Tom.