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● (1730)

[*English*]

The Chair (Hon. Wayne Easter (Malpeque, Lib.)): We'll reconvene and go in public now after our previous in camera session. We're still looking at a statutory review of the Proceeds of Crime (Money Laundering) and Terrorist Financing Act.

We have two witnesses. From Académie Bitcoin, we have Mr. Jonathan Hamel, president. We also have, as an individual, Mr. Shahin Mirkhan, broker of record for Max Realty Solutions Ltd.

Gentlemen, thank you very much for coming. As the clerk made you aware, we're doing this study on money laundering and terrorism financing.

The floor is yours. I believe each of you has a presentation to start with.

Go ahead, Mr. Mirkhan. We'll start with you.

Mr. Shahin Mirkhan (Broker of Record, Max Realty Solutions Ltd., As an Individual): Thank you for inviting me.

With the name of love, Happy Nowruz.

Honourable Mr. Chair, members of the House, good afternoon, *bonjour*. It's a great pleasure and honour for me to be at the Canadian Parliament, in one of the most democratic countries in the world.

I would like to wish each and every one of you a happy and full of love Persian New Year, the beginning of spring, which is tomorrow.

To begin with, I would like to thank the Canadian judiciary system that provides its independence and proves its independence again and again. Without it, fairness and justice would not be served, although I was up against two of the most reputable government lawyers paid for by taxes, and they were right that I was an easy kill for them, but not on Canadian lands, thank God.

Second, I appreciate the Canadian lawmakers who have landed FINTRAC to protect us Canadians and to make sure we do not let any terrorists or their dirty, bloody money laundering into our society and economy. I believe it is a fantastic law to protect us Canadians.

This is the short story of what happened.

I received my real estate licence in 1989 and achieved my real estate broker licence around 2003. After working full-time in real estate for a number of years, and having good publicity in my surrounding communities, I decided to open my brokerage, which was the first Korean-Persian-Canadian real estate company in Canada. At the time my goal was to train new immigrants in this field, and I was trying to attract investors into Canada, which I did. I attracted a lot of good, clean dollars to Canada. In the end, I made a decent living for me and my family.

Up to 2009, I had trained about 188 brokers and agents, some of whom were collecting social services assistance from the government. At that time I sold my house and bought a building from which I was conducting my business.

A couple of months after the FINTRAC law came into effect for real estate brokerages, I was visited by two government employees from FINTRAC. After going through our paperwork, she told me that as a broker of record, I was in part responsible for catching anybody who looks like a terrorist. I looked at her assistant and asked her, “Does she look like one?” She got upset. A few days later I was served with a $33,750 penalty—yes, a $33,750 penalty. After I complained about the fine, it was reduced to $27,000. Of course, my letter was very nice to them. Otherwise, if not, it would have gone up or had no reduction.

On the other hand, I had to be careful when I was mailing it so it wasn't received on Monday, because they might be upset that it was a Monday.

The name “money laundering and terrorist activities” was so scary that the Real Estate Council of Ontario, RECO, decided not to renew my broker's licence, and it was put on caution for four years. I lost my agents. I could not recruit any new agents. Eventually, I lost my business and the new house for my business; I lost my office.

My only question is for the government, which is responsible for executing the law. A police officer has to go through months and months of training in order to execute the law, knowing that any mistake made by them may destroy someone's life. There are government regulatory bodies to monitor them to correct any mistakes made by them. If the money laundering and terrorist activity law is important, which I think it is, what type of training is FINTRAC offering to its employees to give them the tools to destroy a lot of people's financial lives? Whether intentionally or unintentionally they do anything wrong, besides hiring a lawyer and spending a lot of money, which we don't know where to get, who can we take our complaints to? What type of training was FINTRAC giving to real estate brokerages to identify terrorists?

At the end, with all due respect to the members of the House and my dear and favourite Prime Minister Trudeau, I'm sure you will soon notify FINTRAC about the presence of Mahmoud Reza Khavari in Canada. The man has admitted to billions and billions of dollars in money laundering for the Iranian government, for harbouring terrorists in Lebanon, Palestine, and Yemen, and the list goes on and on and on.

● (1735)

In fact, all these achievements for the most terrorist activities in the world are on YouTube for everyone to see. I'm sure, Mr. Chair, that you will soon direct FINTRAC to pursue the yearly demonstration by Hezbollah on Yonge Street and Finch Avenue in North York last year, where they were carrying black flags with Arabic words on them. Does that look familiar?

The major Canadian banks are the account holders of millions and billions of dollars of their money. I'm sure you will direct FINTRAC to check out the Iranian government officials who have dual citizenship in Canada. They are achieving money laundering to Canada from Dubai, Europe, and everywhere else. At the end, my dear Mr. Chair and the government, who is responsible for my losses now?

Thank you very much for giving me this time.

The Chair: Thank you very much, Mr. Mirkhan.

Mr. Hamel, the floor is yours.

Mr. Jonathan Hamel (President, Académie Bitcoin): Thank you.

Mr. Chairman, members of the committee, I am honoured to be invited to this chamber as the president of Bitcoin Academy, a consulting firm specializing in public blockchain technologies, such as Bitcoin. We advise and educate businesses, institutions, governments, law enforcement, and regulators.

From the outset, I would like to specify that my testimony will refer only to Bitcoin, the unit of exchange, and point-to-point payment technology.

It is important to distinguish between Bitcoin and the various other cryptocurrencies in circulation. Bitcoin is considered by the industry and the North American regulators to be a commodity-like asset, such as gold, and to have currency-specific properties, such as divisibility, liquidity, transactability, and fungibility. But let's be clear: Bitcoin it not a currency. Bitcoin is also not a security. Some other cryptocurrencies, like Ether, are more like securities, and the regulators are currently paying close attention. Other cryptocurrencies are downright scams, like Bcash. You heard a lot about Bitcoin —we're going to the moon, and there will be free Lambos for everybody—but despite the seeming lightness of Internet discussions and memes, Bitcoin is a serious industry that is developing at a fast pace in Canada despite the lack of institutional support.

The emerging blockchain technology sector powered by Bitcoin is currently attracting bright people from traditional finance, capital markets, and information technology sectors across the country. Hundreds of millions are invested from coast to coast by daring companies, who see Canada as fertile ground for developing this technology. For example, Coinsquare, a Canadian cryptocurrency exchange, has just raised $30 million and wants to hire more than a hundred people in the heart of Toronto. Bitfarms, a publicly traded blockchain infrastructure company in Quebec, has just announced a $250-million investment in Sherbrooke, one of Quebec's largest private technology investments so far. The project will take advantage of the energy surplus of local producer Hydro-Sherbrooke, enrich the community, and create 250 local jobs. The Royal Bank of Canada, RBC, recently filed a patent application for technology to make credit information data more transparent and efficient using the blockchain. The benefits and potential of blockchain technology, which is widely discussed in the media, are not possible without Bitcoin. I'm going to repeat that for the record. Blockchain does not work without Bitcoin.

Bitcoin also got a whole generation interested in market principles, finance, technology, and the economy in general. To quote Mr. Christopher Giancarlo, chairman of the Commodity Futures Trading Commission, “We owe it to this new generation to respect their enthusiasm for virtual currencies, with a thoughtful and balanced response, and not a dismissive one.”

Now, on the essence of the law that concerns this hearing, I would like to remind you that at its basis, Bitcoin is a decentralized technology that allows voluntary exchange between individuals, which in itself is a peaceful principle and creator of prosperity in society. It is important to remember that most actors in the Bitcoin industry are actively collaborating with law enforcement, governments, and regulators, whether for educational purposes or in the development of a favourable and adequate legal framework for the development of this technology. The Canadian Senate dealt with these issues in 2014, and it is largely due to the wait-and-see attitude of the government regulators and law enforcement agencies that the blockchain industry in Canada has emerged.

It is important to realize that cryptocurrencies and public blockchain technologies are global phenomena and that actors and capital are mobile. States are currently competing to attract major actors to a future economy that could reach nearly $10 trillion by 2020 according to RBC Capital Markets.

Let's now address some preconceived ideas about Bitcoin.

One, Bitcoin is not regulated. Bitcoin, like any means of exchange that can be used in society, falls under the aegis of various Canadian laws against fraud, money laundering, tax evasion, and theft. Using Bitcoin does not exempt you from the existing legal framework in Canada.

Two, Bitcoin is anonymous. Bitcoin is pseudo-anonymous and not anonymous. The system is open and transparent to easily trade like cash, but each transaction is auditable and traceable in the blockchain. I don't know how criminal networks really work, but I'm pretty sure archiving their transactions immutably and publicly on the safest database in the world is not a good idea. Additionally, peripheral players, such as exchanges, require customers to identify themselves through a KYC, “know your customer”, process.

● (1740)

Three, Bitcoin is used for money laundering and terrorist financing. In reality, the use of Bitcoin for illicit activities is minimal. A recent study by the Foundation for Defense of Democracies' Center on Sanctions and Illicit Finance states that "less than one percent" of transactions in the Bitcoin network are linked to illicit activities. At the recent hearings of Bill S.1241 at the U.S. Senate, Jennifer Fowler, deputy assistant secretary for the Office of Terrorist Financing and Financial Crimes at the U.S. Department of the Treasury, stated, "Although virtual currencies are used for illicit transactions, the volume is small compared to the volume of illicit activity [via] traditional financial services."

In conclusion, peripheral actors, such as exchanges, are able to deploy the security protocols required by the current law against money laundering and the financing of terrorist activities. It is not necessary to adopt Bitcoin- and cryptocurrency-specific regulation. Canada is currently one of the most friendly places for the development of blockchain technology. Excessive regulation could challenge hundreds of millions of dollars in investment and kill an infant industry.

Let me end with a quote from the Austrian economist and philosopher Ludwig von Mises: "Innovation is the whim of an elite before it becomes a need of the public."

Thank you for your attention. I am available to answer your questions.

The Chair: Thank you very much, Jonathan.

We will go to five-minutes rounds, starting with Mr. Sorbara.

Mr. Francesco Sorbara (Vaughan—Woodbridge, Lib.): Thank you, Mr. Chair.

Welcome.

On Bitcoin, Jonathan, do we need regulation?

Mr. Jonathan Hamel: I think the current legal framework pretty much covers any means of exchange. I don't think we need a Bitcoin-specific regulation. As I said, Bitcoin in itself is not regulated, but the peripheral actors you use as a customer to enter or exit the network are licensed as money service businesses. With those companies, you are obligated to show your identity to transact. They hold the records of pretty much all the transactions. I don't think we need additional regulation in the current legal framework in Canada.

Mr. Francesco Sorbara: From what I have read, I would probably disagree with that comment. A lot of the money services businesses, Money Mart or something like that, are regulated on a provincial basis, not on a federal basis, if I'm not mistaken, so you would need some oversight from the federal regulatory framework. In terms of, say, a "know your customer" role, that's completely different from just presenting your photo ID and proving your identity. That's my comment there.

What are the disclosure requirements for people who are participating in the Bitcoin market?

Mr. Jonathan Hamel: Some of the major exchanges—Coinsquare and Coinbase, for example—use third party services to authenticate the customers. I would say that most of them use a KYC process that is on par with such traditional finance actors as banks or insurance. I would say it's pretty solid as a mechanism.

● (1745)

Mr. Francesco Sorbara: Just to veer a little bit, obviously your exposure to this is much more than that of a member of Parliament's. In terms of financial innovation, where in your view is Bitcoin and Bitcoin technology—underlined by blockchain, if I understand that correctly—taking the Canadian financial sector and, for that matter, the worldwide financial sector?

Mr. Jonathan Hamel: As I said in my presentation, it's a misconception that we can have blockchain technologies without a native cryptocurrency like Bitcoin, because it's really the incentive that makes the system work. A real and revolutionary process that will be developed on blockchain technology really needs public blockchains like Bitcoin, for example. I don't think we can have one or the other. Both are needed to foster innovation.

We see many interesting use cases. For example, in the supply chain industry—where we can trace the authenticity of drugs in emerging markets, or whether it's for capital markets to move funds —hundreds of millions of dollars, probably billions of dollars, could be saved for companies in Canada on an annual basis.

Mr. Francesco Sorbara: It's my understanding that one of the advantages of using Bitcoin technology is that the data integrity, or the security of the actual transaction, is very high. Is that correct?

Mr. Jonathan Hamel: Yes, that's very correct. In terms of security, Bitcoin uses the same cryptographic algorithms that standard Internet protocols do, which is 256-bit encryption. You have as a good a chance to crack just one Bitcoin account as you do of guessing the winning combination for the Powerball lottery nine times in a row. It's pretty solid as a technology.

Storing data on a public blockchain like Bitcoin is enforced through a mechanism we call "proof of work" mining. This is why: Bitcoin mining is essential to store and enforce the authenticity of data. That's why to develop what I would say is a revolutionary mechanism built on blockchain, you need mining, and you need actors such as Bitfarms, which is in Quebec.

Mr. Francesco Sorbara: Just to finish off that comment about the security integrity, that's why on the flip side you would need a robust oversight. If individuals, organizations, or enterprises are using Bitcoin technology for something that we would not want them to use it for, whether it's terrorist financing, say, or money laundering and so forth, you would need the authorities to have the proper tools, oversight, and robustness within the system to be able to obtain the data they would need to use or to look at the transaction. That's what I would argue for: to have that robust oversight and regulatory oversight for that system.

Mr. Jonathan Hamel: On the data itself, some of the most interesting use cases will rely on the open and transparent nature of the blockchain to read data in an open way, but in terms of access, you cannot crack modern cryptography. I don't think the Government of Canada can.

Nobody in the world can crack modern encryption, and Bitcoin is no different. You probably saw the authorities in the U.S., for example, trying to unlock the phones of criminals. It's the same principle here. Modern and strong encryption is essential for individual liberties.

The Chair: Thank you.

I have a dumb question. Where does Bitcoin reside?

Mr. Jonathan Hamel: Physically?

The Chair: Yes. I have difficulty understanding something I can't touch. I like to able to touch a dollar bill. Well, we can't do that anymore either—

Voices: Oh, oh!

The Chair: —so I'll say a five-dollar bill. Explain that to me.

Mr. Jonathan Hamel: Yes. One of the big misconceptions we have about Bitcoin is that most of the articles we read always display the physical coin, but there are not many of these coins around. The coins are just an abstraction.

Bitcoin—the network—is what we call the "peer-to-peer network". Instead of having a centralized server—for example, Google or Microsoft—it's a network of thousands of computers that are all connected. That's why the network is safe and is also immune to political censure: you cannot physically pinpoint all the locations of the network.

Speaking of that, the locations of the Bitcoin are stored on what we call the "blockchain", which is the open public ledger. Think of an accounting ledger. All the Bitcoin transactions since day one have been stored on that open database, stored on thousands of computers across the world. One of the major properties of that network is that all the transactions are completely open and transparent for audit. That's a new paradigm. Of course, public finance could benefit from that.

● (1750)

The Chair: Thank you.

Mr. Albas.

Mr. Dan Albas (Central Okanagan—Similkameen—Nicola, CPC): Thank you, Mr. Chair.

I'd like to thank both our witnesses for being here today and for sharing some of their understanding of FINTRAC as well as the general systems we are dealing with. Obviously this review has important perspectives that need to be heard.

I'll start with you, Mr. Hamel. This seems to me to be more a question of regulators' unfamiliarity with Bitcoin and blockchain. It sounds to me like there are a number of ways to verify and whatnot. Do you think it's just a matter of the regulators understanding this technology better?

Mr. Jonathan Hamel: Absolutely, and that's why we see organizations such as Coin Center in the U.S., for example, based in D.C., that are actively educating regulators. We saw recently with the hearings at the U.S. Senate that most regulators, such as the SEC and the CFTC, are mostly open in adopting a wait-and-see approach, because the technology is still in its infancy. There's a lot of media coverage about Bitcoin, but it's still small as an asset class. It's less than $500 billion. I would say that the media coverage we see is disproportionate related to the total size of the asset.

For regulators, I would say that there's definitely a strong interest from the Bitcoin community to educate and to participate with the regulators. For example, I'm sitting on the fintech committee at l'Autorité des marchés financiers, the Quebec regulators, and it is talking about cryptocurrency and other FINTRAC subjects. There is, I would say, a strong interest. There's an appeal to the community to participate and collaborate with regulators and with law enforcement such as FINTRAC, for example.

Mr. Dan Albas: When the public looks at it—and obviously technology comes in different spurts and starts, and as you mentioned earlier there are different cryptocurrencies out there—is this an example of how Bitcoin itself and other related technology should be the starting point for Canadian regulators to look at as an example that they can work with? There seems to be a lot more adoption of it than of some of these other cryptocurrencies.

Mr. Jonathan Hamel: I would say that I separate Bitcoin from the others because Bitcoin really has the properties of a commodity. First of all, there was never a price set for Bitcoin. It really emerged organically from the community. There was no emission of Bitcoin. It was created, I would say, on the Internet, and it really grew organically, so there was never a launch like there was for most of the cryptocurrencies. For example, the second-biggest cryptocurrency, Ether, was launched based on what we call an ICO—initial coin offering. Now regulators are looking at those activities that are probably the emission of securities, because they're raising capital to launch a technology. Bitcoin is different because it never raised money. It really grew organically, and adoption grew organically as well. There was never a price set for the commodity. It really behaves like a virtual commodity such as gold.

Mr. Dan Albas: Thank you very much for your expertise.

Mr. Mirkhan, thank you again for your presentation today. I'm really not looking to relitigate your case, so to speak, but I do have some questions, because you have rightly asked who regulates the regulators. Obviously FINTRAC was created under a parliamentary statute, and there are avenues such as the courts.

When you were issued a fine, which you subsequently sought to have lowered and were successful in that, did you take it to court at some point? That is the natural alternative for someone who disagrees with a government fine.

Mr. Shahin Mirkhan: Yes, sir, I fought for four years. For four years I went back and forth to the court. At first they asked me to hire a lawyer. I talked to several lawyers and they all told me that it was funny and that they had never heard of FINTRAC for real estate. Then I found one of the most reputable law firms in downtown Toronto. They took the case and I gave them $10,000, and they called me in about two to three weeks asking for another $10,000. Then for two or three weeks after that I called them to see what was happening. It was all over the news. They took the trust account and they closed down the firm and everything. I went to court and I told the judge, “Money laundering terrorist activity is a big thing. I can't find a lawyer, and I can't afford a lawyer. Send me to Guantanamo Bay, Cuba.”

● (1755)

Mr. Dan Albas: Again, I'm not asking you to reiterate. I just want to make sure that you did have the option, and that you did try to have your day in court. It sounds as though you decided not to continue your case based on it.

Mr. Shahin Mirkhan: I did continue my case as far as I could.

Mr. Dan Albas: Yes, I understand.

Mr. Shahin Mirkhan: However, if you don't have a lawyer, going through Federal Court is not an easy task.

Mr. Dan Albas: That is a fair observation, sir. A lot of people have said that the cost of court makes it difficult for them to feel that they have their day in court, and so often they will not pursue it because of that. However, again, I'm not here to relitigate your case. I'm here to understand that those avenues were put in front of you.

You said that originally someone came by and said that there were certain obligations that you as a brokerage at the time hadn't completed. Obviously I'm sure there were other brokerage firms that were able to get their work done. What particular issues did they take with your particular brokerage's records?

Mr. Shahin Mirkhan: They checked some of our files. They said we didn't have FINTRAC officers, even though I was a FINTRAC officer and my brother was a FINTRAC officer there. We came on the wrong side of each other because when she asked me to pinpoint the terrorism, I didn't know how important it was, and I looked at her assistant and I said, “She looks like a terrorist” and she got upset. Everything started from there even before the four years....

My problem is not.... If I get into any problem with this gentleman, I need a court. However, you're talking about the government. If you have the power to destroy my business, there has to be a body in the government with which I can talk to see what is going on, not to hire a lawyer and go through the court to tell my government what is going on.

Mr. Dan Albas: Again, I'm glad that you had that option, sir, because I do agree with you that governments are given a lot of power. Especially once Parliament makes a law and delegates it to an organization, they do have a tremendous amount of power. I'm glad you got to share some of your story today.

Thank you.

Mr. Shahin Mirkhan: Thank you.

The Chair: Before I turn to Mr. Dusseault, just on this line of questioning, I think in the beginning, Mr. Mirkhan, you mentioned you felt there wasn't enough training on your side to deal with what you had to deal with. Am I correct that you felt there was an obligation there, on the part of government or whoever, to ensure there was training, so you would know, as a real estate broker, how to deal with this entity, FINTRAC?

Mr. Shahin Mirkhan: Exactly, Mr. Chair. Before you ask me for anything, you have to train me, then ask me if I did anything wrong. Where was the training? You just sent an email. I didn't get it from the government, I got it from the franchise I was with at the time, HomeLife, that this is FINTRAC, in effect, and these are the things you have to do. Not one of them mentioned I have to catch terrorists. Why?

The Chair: Okay, that leads me somewhere.

Mr. Dusseault.

[*Translation*]

Mr. Pierre-Luc Dusseault (Sherbrooke, NDP): Thank you, Mr. Chair.

I will turn to Mr. Hamel with my questions about cryptocurrencies and will talk about not my own interests, but those of my riding. I am the member for Sherbrooke, so the announcement made by Bitfarms —

Mr. Jonathan Hamel: Congratulations!

Mr. Pierre-Luc Dusseault: I hope that the development of those technologies will go well and that legislators will not impede it.

My question is rather about other cryptocurrencies. You are saying that bitcoin is pseudo...

Mr. Jonathan Hamel: It is pseudo-anonymous.

Mr. Pierre-Luc Dusseault: That's right.

If my understanding is correct, there are other cryptocurrencies that are completely anonymous.

Mr. Jonathan Hamel: Yes, absolutely. Technologies such as those from Monero, Zcash and a number of other currencies make them completely anonymous, so we lose track of transactions completed using those currencies.

Those currencies are probably used on what we call the dark web, or the illegal Internet, which is the part of the web that is the most difficult to access for average people. Those technologies are probably also used for illicit trade because they are not traceable.

● (1800)

Mr. Pierre-Luc Dusseault: As legislators, we should look into those technologies created to preserve anonymity.

You are saying that bitcoin transactions can be accessed. Is that public? Can anyone access a database containing transactions and user names? Of course, those are not real last names and first names, but rather user names.

Mr. Jonathan Hamel: Yes. Those are code names, also referred to us as wallets or bitcoin accounts. They are identified in a pseudo-anonymous way, but they are relatively easy to trace. For example, the RCMP may seize a computer and identify the wallet of a drug dealer. It will be able to trace that dealer's transactions and perhaps even establish a link with a network. That technology is very easy to trace.

When it comes to the more anonymous currencies, we are starting to see an autoregulation in the exchange of those currencies. For example, Japan decided to stop dealing with anonymous currencies. The industry seems to be putting forward two categories of cryptocurrencies, with bitcoin being the first or the standard of cryptocurrency and the easiest to trace, and the others, which are difficult to trace.

Mr. Pierre-Luc Dusseault: Other witnesses have told us that, to have access to the bitcoin's value, an individual needed to have a bank account. People can keep bitcoins in a wallet, as you are saying, but if they want to use that money in their daily life, they need a bank account. At the end of the day, it can be traced back to a physical person with a real last name, first name and address.

Mr. Jonathan Hamel: You are absolutely right. There is no direct link between bitcoin and the traditional banking or monetary system. To deposit or withdraw bitcoins, people have to use an intermediary, as in the case of cryptocurrency exchanges such as Coinsquare and Coinbase in Canada.

Those players are the ones who require that their clients be identified. According to what I read in the legislation on money laundering and prevention of financing for terrorist activities, the Proceeds of Crime (Money Laundering) and Terrorists Financing Act, that protocol could easily be deployed by those players.

That also goes for some exchanges of currencies on the street, where bitcoins are bought and sold. Above a certain amount—I think the threshold is $3,000—people have to provide a piece of ID. When someone wants to deposit or withdraw bitcoins in Canadian or U.S. dollars, they also have to identify themselves.

Mr. Pierre-Luc Dusseault: For example, when it comes to the obligation to produce reports, we know that banks have very important obligations in terms of submitting reports to FINTRAC and other organizations.

However, in your case and in the case of Bitcoin, there is no central administration. If I understand correctly, the whole principle consists in not having any kind of a centralized system.

Banks have to run checks when suspicious transactions are entered into the system, among other situations. When an operation is suspicious, we know that it may be related to crime or criminal activities.

In the case of bitcoin, when suspicious transactions take place and it is known that they are made for criminal purposes, who would be responsible for reporting them to the authorities to ensure that the case is well documented?

Mr. Jonathan Hamel: I think that a synergy and a collaboration can be developed between organizations such as FINTRAC and the major cryptocurrency platforms, such as Coinsquare or Coinbase.

For example, there is a potential list of people who are under sanctions and have been prohibited from doing business in Canada. When it comes to such sanctions, it could be easy to identify those people if they open accounts revealing their true identity, obviously. So those are side actors, like those involved in exchanges, that could have a relatively natural synergy with organizations such as FINTRAC. I think it is in the interest of the Bitcoin community to ensure that the technology is not used to facilitate money laundering and the financing of terrorist activities.

As I was saying, so far, the community has always collaborated, and it is participating, for example, in establishing a legal and legislative framework that will help develop the good sides of that technology.

[*English*]

The Chair: We'll have to leave it there.

We'll turn to Mr. Fergus for five minutes. We are going to run into bells at about 6:15, but we can go a few minutes after that. Go ahead.

● (1805)

[*Translation*]

Mr. Greg Fergus: Thank you very much, Mr. Chair.

I would like to thank today's two witnesses for their presentations.

I will start with Mr. Hamel.

Mr. Hamel, I have a question that may be a bit simple, but I hope you will be able to answer it.

Do you think that digital currencies are used to launder proceeds of crime or other criminal activities?

Mr. Jonathan Hamel: I think they are, on a rather minimal level, as I said in my opening remarks.

I am referring to the report according to which less than 1%, or around 1%, of transactions might be related to illicit trade, for those reasons I mentioned earlier: bitcoin transactions can be traced relatively easily. So in and of itself, it is a bad technology for criminal activities, since the transactions made will be archived forever in one of the most solid and secure databases in the world.

So only a very small portion is probably related to crime, sort of like with cash, for example. Cash is basically used for illicit activities, but I don't think a very large portion of cash is related to things like the drug trade or various illicit activities.

Mr. Greg Fergus: According to you, are cash or other forms of currency more or less secure than digital currencies?

Mr. Jonathan Hamel: In nominal value....

Mr. Greg Fergus: No, I'm talking about percentages. You estimated that 1% of....

Mr. Jonathan Hamel: For example, the Under Secretary of the Treasury was saying that the U.S. dollar and the traditional banking channels are used much more by people who are trying to launder money and for financing terrorist activities than technologies like bitcoin.

Mr. Greg Fergus: Do you know what the percentage is?

Mr. Jonathan Hamel: I don't know what the percentage is, but it's....

Mr. Greg Fergus: I'm sorry. This is not a hostile question, but you brought up a number. You think that 1% of transactions made using digital currencies are suspicious.

Mr. Jonathan Hamel: That figure relates to bitcoin.

As Mr. Dusseault said earlier, in the case of some currencies, we just don't know where the transactions are going because they are truly anonymous. The problem may be more on that side.

However, when it comes to bitcoin itself, the technology is traceable, transparent and pseudo-anonymous. For police forces, for example, it is relatively easy to take action. They are starting to use some pretty advanced tools to gather evidence. We are starting to note that, for example, at the RCMP and in various police forces around the world.

Mr. Greg Fergus: Do you think that bitcoin users like you would accept less anonymity in order to support crime fighting efforts?

Mr. Jonathan Hamel: In the protocol itself, no, because it is established consensually on the network. It is immune against any government action. However, as I was saying, bitcoin users who use exchange platforms such as Coinsquare and Coinbase are already relinquishing part of their anonymity by identifying themselves. What you are proposing already exists among players who are established on the network.

Mr. Greg Fergus: I am sure that you followed our meetings on this study. A number of security experts at the RCMP and FINTRAC told the committee they believed that bitcoin or digital currencies are a plague on the system when it comes to ensuring that money is used for legal purposes.

Those professionals feel that there is a problem, but you are convinced they are wrong. Why do you think that?

Mr. Jonathan Hamel: I don't agree with them. I don't think that, to prevent criminal activities, we should attack pseudo-anonymity and the “transactability” of the bitcoin technology, which is a bearer note, sort of like cash. As I said, the players involved have all the necessary information and want to collaborate with organizations such as FINTRAC to identify malicious players.

That said, I don't think that, in the case of this technology, we need to identify participants more, at least not through the protocol. It would actually be very difficult to do so. If Canada had to take that road, it should think about how to proceed. This raises worrisome questions about the Internet's neutrality. If Canada had to require the identification of participants on the bitcoin network, the entire industry of block chains that is currently emerging in Canada would topple by tomorrow.

● (1810)

[*English*]

The Chair: We'll have to leave it there.

Mr. Poilievre.

Hon. Pierre Poilievre (Carleton, CPC): Mr. Hamel, thank you for your testimony.

I want to ask about the intrinsic value of Bitcoin. Currencies have traditionally held their value because they've been backed, either by a commodity like gold, or produced by a precious metal like silver, or more recently, just by the implicit taxation power of the government that stands behind that currency. Bitcoin has none of those things. Why should we believe in its intrinsic value?

Mr. Jonathan Hamel: On the intrinsic value of Bitcoin, first of all, I will restate that there was never a price set for Bitcoin. The value that you see today is really based on—

Hon. Pierre Poilievre: It's the market value.

Mr. Jonathan Hamel: Yes, the market value. Some economists say that gold is also a bubble, but it's a 5,000-year-old bubble. I would say that Bitcoin has value because people see utility in the network. It is secure, easy to transact, and fungible, and you can separate every subunit of Bitcoin to the hundred-millionth of a unit. In every aspect it's a really good currency, but it's not a currency by definition.

You mentioned gold. I think the similarities with gold are really close, but I would say that the intrinsic value from Bitcoin really comes from the market that values it. I think it's a catch-22 to analyze Bitcoin with traditional financial paradigms.

Hon. Pierre Poilievre: The market determines the price; it doesn't necessarily determine the value. I make a distinction between price and value in the following way. During the dot-com bubble, the price of stocks in companies that had no earnings or, in some cases no revenue, was very high. That was based on voluntary purchase and sale of securities in those companies, but the value obviously wasn't that high, and eventually the price fell to the value, and the bubble burst. Just because people are paying a certain price for Bitcoin doesn't mean it is worth that.

Mr. Jonathan Hamel: I would say that people were pricing a future Internet revolution that probably a lot of the companies involved in were not able to deliver. I would say the difference between the Internet bubble and the actual cryptocurrency market is that the Internet bubble was using a lot of leverage. There's no leverage in Bitcoin. It's pretty much an all-cash market, so you cannot have a cascading effect of market crash and margin calls and people losing everything. That's why people involved in Bitcoin and cryptocurrency are able to sustain 50%, 60%, or 80% loss: it's because they probably paid entirely in cash, their holdings. That's a big difference from traditional markets.

I think we can safely say that the real Internet revolution came after the Internet bubble. Companies like Amazon went through it, and bigger companies like Google emerged afterwards. The multiplication of all coins—coins that are copied based on Bitcoin and launched through initial coin offerings, which pretty much look like scam IPOs—are probably similar to the dot-com bubble. However, we think that the true revolution will come afterwards.

Hon. Pierre Poilievre: At least during the dot-com era you could speculate that one day these companies would turn a profit, which they would translate into dividends, so you could speculate on an intrinsic value down the road. Bitcoin doesn't even purport to pay dividends. Owning a Bitcoin will not pay you a dividend, unlike a share in a company that may one day profit. I guess what I'm saying is, what is underneath Bitcoin that is valuable and that therefore justifies the price?

Mr. Jonathan Hamel: First, there's a finite amount of Bitcoin—there are only going to be 21 million Bitcoin. It's kind of like gold in that it's a safe asset. It's funny to say this when we have 30% to 40% fluctuation, but it's still an early and young market. Probably in the early days of gold, gold prices were fluctuating 20%, 40%, or 50%, maybe 5,000 years ago. However, we believe that in the future Bitcoin will remain pretty much stable, and I'm on the side of people who think that Bitcoin will become some kind of reserve currency, kind of like gold was in the early 20th century. Maybe other cryptocurrencies or other smart assets will be based on that finite amount.

One interesting property of Bitcoin is that not only is the finite amount known, the rate emission through time is known. In a Parliament like that, having confidence in an asset that will deliver predictable inflation through time, I think, makes it pretty interesting. People have confidence in the Bitcoin protocol and in the developer who actually sustained and maintained the technology.

● (1815)

The Chair: You can have one last, very short question.

Hon. Pierre Poilievre: I've heard economists propose that blockchain technology could be a solution to corruption, particularly for land registries in underdeveloped countries. Because of the dispersed nature of blockchain, it would be very hard for a corrupt government official, for example, to switch a land title to a friend, family, or himself, and therefore future property registries could go on the blockchain. I think Georgia has done that.

Mr. Jonathan Hamel: Yes, the country of Georgia did it. You mentioned a really interesting use case. There's also a pretty interesting use case with the traceability in the supply chain of medication. I work in a few emerging markets, especially West Africa, where you can buy medicine in the drugstore, and the medicine you pick up from the shelves is counterfeit. You could use blockchain technology to trace and make sure that every actor in the supply chain would, for example, sign with their own private key, and that data would be stored on the blockchain.

It's really the public blockchain—for example, the Bitcoin blockchain—that has the most computer power behind it. That's why it's hard to tamper with the data. There are billions of dollars involved if you want to tamper with only one inscription.

Hon. Pierre Poilievre: That's interesting. Thank you.

The Chair: Do we have permission to go to one more questioner?

Some hon. members: Agreed.

Ms. O'Connell, go ahead.

Ms. Jennifer O'Connell (Pickering—Uxbridge, Lib.): Thank you, Mr. Chair.

Thank you both for coming.

Mr. Mirkhan, I'm sorry, but I missed what you said at the beginning. Which province did you say you operated in?

Mr. Shahin Mirkhan: It's Ontario.

Ms. Jennifer O'Connell: Were you ever a member of the Ontario Real Estate Association or CREA?

Mr. Shahin Mirkhan: Yes, I am.

Ms. Jennifer O'Connell: Then I guess you didn't realize that both of those organizations provide FINTRAC training and your obligations within it?

Mr. Shahin Mirkhan: No, I didn't know that.

Ms. Jennifer O'Connell: You didn't know.

Mr. Shahin Mirkhan: I didn't know that three months after this law came into effect. Nobody even knew about it. They came and they audited us.

Ms. Jennifer O'Connell: Do you feel that there are some obligations...? You weren't just a real estate agent; you were a broker, which means you were responsible for other agents who worked for you. You actually had a higher obligation to understand the laws within the jurisdiction in which you operated. Just as sometimes tax policy changes, either provincially or federally, and it's your obligation to understand what those changes are and to file your taxes accordingly. Furthermore, when you get a real estate licence or when your agents get a real estate licence in Ontario, there are obligations. You feel that for FINTRAC the government has the obligation to inform you, but for things like paying your taxes and remitting the actual taxes or knowing any changes, you have to understand your obligations as a business owner.

FINTRAC works with local associations—in your case Ontario—and the Canadian Real Estate Association to provide information to their members. Did you ever go to CREA or the Ontario Real Estate Association to ask how come they didn't provide you, as a member, with this information?

● (1820)

Mr. Shahin Mirkhan: No, nobody knew about it at that time. Not even the franchisees knew about it. I called RECO, the Toronto Real Estate Board, and CREA. People at the government level sit until somebody gets hurt and then they say, “Oh, he got hurt. Now we have to do this.” Nobody knew anything about it.

Ms. Jennifer O'Connell: Thank you.

Mr. Hamel, you mentioned earlier in your presentation that Bitcoin and blockchain go together exclusively. I've heard otherwise. Can you maybe elaborate on why you feel that's the case?

Mr. Jonathan Hamel: Yes. I would say that there are some competing networks that resemble some features of the Bitcoin blockchain. However, the true nature of a blockchain is the fact that it's immutable—you cannot tamper with data. To have that property, you have to have true decentralization. Having a closed network without any incentive for a participant to enforce consensus doesn't create the condition for a true immutable and decentralized blockchain. In reality, most of the use cases that these competing platforms try to address don't really need blockchain. When you have a closed network of people who already trust each other, you don't really need a blockchain. That's why public blockchains that are enforced by proof of work like Bitcoin aren't a true blockchain.

Ms. Jennifer O'Connell: If we go back to the question by Mr. Poilievre and the example of land registries, what does that have to do with Bitcoin? That's blockchain technology without the Bitcoin component. In terms of a type of technology that is highly encrypted and obviously has that benefit, I don't see how they have to go together. In that one example, I didn't hear anywhere that Bitcoin was a factor in land registry in potentially corrupt situations.

Mr. Jonathan Hamel: It's because most of these projects are fakes or scams. The real interesting use cases will be based on public blockchains like Bitcoin. In fact, the only way to write and store data on a blockchain like Bitcoin is by doing a Bitcoin transaction. People now are actively developing second-layer protocols—for example, Rootstock—that rely on the proof of work mechanism of blockchain to, for example, create smart contracts. Advanced technologies and advanced use cases like land registry and supply-chain tracking could be developed on top of the Bitcoin blockchain. With respect, I think the real revolutionary blockchain use cases will be built on public blockchains.

Ms. Jennifer O'Connell: Just to clarify, that's assuming that someone can't replicate the blockchain that Bitcoin established.

Mr. Jonathan Hamel: You can, if you want. You can start today, but Bitcoin has billions of dollars of computing power behind it to enforce the consensus and the authenticity of transactions. There is a network effect. It's the same thing as not wanting to create a second Facebook or a second Google. You can if you want, but there's a strong network effect to use the actual network.

The Chair: You have time for a 30-second question, Pierre, and then we have to run.

[*Translation*]

Mr. Pierre-Luc Dusseault: You said that the number of existing bitcoins was limited. I think that you brought up a figure of $21 million.

Mr. Jonathan Hamel: It is in fact $21 million.

Mr. Pierre-Luc Dusseault: You also said that a certain number of bitcoins were created every year. Who set that number? Could it potentially be changed?

Mr. Jonathan Hamel: You are right. That number was in bitcoin's initial submission, which laid out the particularities and attributes of bitcoin under the pseudonym of Satoshi Nakamoto. We don't know who he is. It may also be a group.

This decision could be changed, but the consensus required to change that attribute is relatively improbable, since the vast majority of players in the bitcoin world behave in an economically rational manner. It would be irrational to devalue their assets. For example, by wanting to double the total quantity of bitcoins, bitcoin owners would devalue their currency for no reason. In fact, the real strength —

Mr. Pierre-Luc Dusseault: Would there be a vote? How would it work?

Mr. Jonathan Hamel: At bitcoin, users vote. It's a false belief to think that minors control bitcoin. The actual people who control bitcoin are users, who vote, in a way, by choosing the version they use. To change that attribute, what is called a fork would have to be done, which means going to another version that would be something different from bitcoin. So it would no longer be bitcoin, and the majority of users would have to be convinced to use that version, so it is very unlikely.

● (1825)

[*English*]

The Chair: We'll have to leave it at that. This has been a very interesting discussion on both fronts.

Thank you, Mr. Mirkhan.

Thank you, Mr. Hamel.

We have seven minutes and 30 seconds to get to a vote, so the meeting is adjourned.

Thank you very much.