Transcript of IMF podcast:

Tobias Adrian on the Future of Finance

Tobias Adrian:

We are living in a very exciting time. I think we are seeing a revolution of the financial system.

Bruce Edwards:

We talk a lot about how technology is changing the way we do things, but the impact of technology on our financial lives is no less profound.

Tobias Adrian:

And I'm sure that over five to 10 years, we will have undergone a dramatic change in the financial system. But it's very hard to say today how that is going to look like.

Tobias Adrian:

My name is Tobias Adrian. I am the Financial Counselor of the International Monetary Fund and the Director of the Monetary Capital Markets Department. And my work covers everything that the central bank is doing, ranging from monetary policy, to regulation, to crisis management, payment systems, as well as climate finance and digital finance.

Bruce Edwards:

Today, we introduce a new IMF podcast series that focuses on financial technology. FinTech Forward will draw from the expertise of the IMF Monetary and Capital Markets Department to better understand the impact of emerging technologies on not only the global financial system but on local economies and households around the world.

Tara Iyer:

So welcome to the IMFs new monthly podcast series on FinTech. My name is Tara Iyer. I'm an economist in the IMF Monetary and Capital Markets Department. This first episode, we'll focus on the rise of FinTech and what's needed in terms of policy frameworks.

Tara Iyer:

Hi Tobias, and thank you so much for inaugurating the new FinTech podcast series. To start with, could you tell us what FinTech is and give us an overview of this emerging field?

Tobias Adrian:

Yeah, thanks so much. FinTech refers to the application of modern digital technologies to financial services. In particular, technology and the innovation around technology can have a profound impact on business models, on processes, and on products. So for example, the kind of apps that you have on the cell phone in financial services are oftentimes the result of FinTech innovation. And so FinTech has the potential to impact both financial markets and financial institutions to really change the customer experience, but also change the risks and the potential regulatory implications. So let me go through some examples. Neobanks, Big Tech, crypto, and electronic money. So neobanks are digital banks that typically serve customers that are underserved, such as younger, lower income, riskier borrowers. And they operate not through brick and mortar branches, but through websites and mobile apps. And so some neobanks are just like normal banks, but they're entirely virtual.

Tobias Adrian:

Secondly, let me turn to Big Techs. We all know the Big Techs, we use them probably every day. And Big Techs are entering into financial services more and more. Typically they don't have charters as banks, but they conduct many services that normal financial institutions such as banks would facilitate. And that includes payments, lending, asset management, and even insurance services. Now, what is often the case for Big Techs is that they're using the data that they're collecting on the consumer side to make financial sector or financial product decisions. And so there's a whole debate around how data can be used by Big Techs. My third example are crypto assets, and I think everybody in this audience knows what a crypto asset is. It's using cryptography, generally combined with distributed ledger technology to create coins that can be traded. And so the crypto assets have been shown in our work to be increasingly interlinked with traditional financial services.

Tobias Adrian:

There's more and more volatility that is co-moving in between the crypto assets and traditional assets such as stocks and bonds. There are also particular crypto assets that are backed by other assets. Those are referred to as stablecoins. They could be backed by cash-like assets or by commodities such as gold. My fourth example is e-money. E-money Allows users to digitally transfer money to third parties via prepaid credit cards or electronic devices such as mobile phones. And so e-money is particularly important in some parts of the world, such as East Africa, where e-money really has fueled financial inclusion, but also growth.

Tara Iyer:

Could you tell us maybe a little bit more about how Big Tech firms and financial services differ from the more specialized, smaller FinTech firms and FinTech startups, and also how Big Techs re-bundle financial services?

Tobias Adrian:

So Big Tech firms are traditionally firms that are in businesses such as surge or consumer finance or consumer products, but they're entering more and more into financial markets. And so the kind of financial services that they're offering is typically tied to the kind of services that they're offering in their usual businesses. So Big Techs, when you look at their websites, they have a very broad array of financial services that are being offered, in particular, in the business to business, the B2B segment. So for their providers, they do lending, they do produce a finance and trade finance and they intermediate payment services as well. So they offer many of the services that otherwise banks would offer, but they don't have licenses like banks. They really are Big Techs that are doing some degree of finance.

Tara Iyer:

Yeah, thanks. Tobias, The Bahamas has recently launched a central bank digital currency, or CBDC, which they call the Sand Dollar. And El Salvador and Central African Republic have adopted Bitcoin as legal tender. Can you help us make sense of the different types of digital assets out there?

Tobias Adrian:

Yeah, absolutely. So there are CBDCs, so central bank digital currencies, which is digital cash. So those are liabilities of the central bank in digital form. So in the case of The Bahamas, if you buy a Sand Dollar, you are literally holding the liability of the central bank of Bahamas. But instead of holding it in the form of a banknote or an account, you hold it as a token with just digital cash. So some CBDCs are using crypto technology. That's not necessarily the case, so you could have the CBDC that are account based, and that are based on traditional payment systems with accounts. But tokenized forms of CBDCs are typically using crypto technology. Not necessarily, but typically, and this is what we are seeing, for example, in The Bahamas. Now, crypto assets were initially created unbacked. So their value is totally speculative. But a couple of years ago, backed crypto assets, that are usually called stablecoins, have emerged.

Tobias Adrian:

And so the backed crypto assets have their value tied to the reserve. So the reserve could be in cash. So it could literally in principle, if a stablecoin is issued by a bank, the stablecoin could issue a token against high powered money. So it would be very similar to a CBDC and would be sort of like a synthetic CBDC. We don't quite have that at the moment, but we do have some banks that are issuing stablecoins. But when we look about in the stablecoin universe, there's a huge variance in terms of what kind of reserve assets they're holding. And so some stablecoins are actually very risky. And in the past month, we have seen the collapse of certain stablecoins. There were runs on the reserves of the stablecoin, and these were typically backed by crypto assets, so very risky reserves. So in between stablecoins that are backed by high powered money or by cash, stablecoins that are backed by securities, such as commercial paper and stablecoins that are backed by other crypto assets or risky crypto assets, there's a huge variance in terms of how risky and how safe they are.

Tara Iyer:

So to my understanding, so crypto assets are unbacked, stablecoins are backed, and so are CBDCs. Could you tell us a little bit more about why CBDCs are so much safer potentially than stablecoins?

Tobias Adrian:

Yeah. The financial system ultimately relies on trust, right? So I'm trusting my bank to deposit my cash and I'm very sure that tomorrow, or in a month, or in a year, I will get back that cash if it's in a deposit. I trust my broker that if I invest in an S&P 500 ETF or index, that I will get back the value that the S&P 500 is undertaking in between the time that I put in the money and the time I take out the money. And this trust is very much rooted in the role of the central bank in the financial system. For many hundreds of years, central banks did not exist. And there used to be common runs and liquidity problems in the financial system. And so pretty much every country in the world nowadays has a central bank, because it has been recognized that financial systems need to have a liquidity backstop and they need to be regulated.

Tobias Adrian:

And so stablecoins at the moment are neither regulated, nor do they have a liquidity backstop. And so I personally would not trust most of the stablecoin providers. So there's a variance, again, as I pointed out earlier, there's a variance in terms of how trustworthy they are in terms of disclosures, how trustworthy they are in terms of the governance of the stablecoin, and how liquid the reserves are. And so central bank digital currencies would be digital cash that would be fully trustworthy, at least as trustworthy as your central bank. And so it's an extremely important anchor for the digital economy to have CBDCs.

Tara Iyer:

Yeah, thanks so much Tobias. That's very clear. And in fact, we just recently saw the Terra Luna collapse, which led to a big wipe out of the crypto markets. So that follows up on the point you just made. I have another question... The crypto asset market cap exploded 20 fold during the COVID pandemic to $3 trillion in end 2021 before falling back to less than $1 trillion in the past few months. And that's quite a collapse. Retail investors are increasingly holding crypto assets and also turning towards digital financial services. Could you maybe tell us about some risks related to FinTech?

Tobias Adrian:

I would say the first risk is related to crypto assets themselves. So crypto assets are determined in terms of their values largely by speculation, right? So what is the value of a Bitcoin or an Ethereum is largely determined by the value that the average investor is willing to pay. And so the volatility of crypto assets is pretty high. They're as volatile as very illiquid stocks for example. Much more volatile than an S&P 500 index for example, and more volatile than the large majority of commodities. So crypto assets are unregulated. There's no consumer protection, there's oftentimes a lag or only a partial verification of identity. So there are financial integrity issues. So it's very difficult for the public sector to know to what extent transactions that are done are fully legal. There are financial stability concerns. For example, there's no prudential supervision or regulation of crypto assets. There are high environmental costs, right? The mining of Bitcoin is extremely expensive and crypto assets can potentially undermine the monetary stability of countries.

Tobias Adrian:

So while technology driven innovations of financial services offer many benefits, there are also risks and costs. And so it is very important for policy institutions such as the IMF to develop policies that enable regulators to make sure that the new technologies are just as trustworthy as our well known existing and well regulated banks.

Tobias Adrian:

So the use of distributed ledger technology, for example, has the potential to generate efficiencies in many functions, such as back office functions, remittance payments, but also trading. But distributed ledger technology really should be rewired in a way to serve the public interest, to serve policy objectives. And I think this is where a lot of innovation is going on at the moment in institutions, such as the IMF, the BIS and the FSB, the Financial Stability Board, where members of the public sector are also innovating. But they're innovating in terms of trying to use these technologies to optimize policy purposes. So when we are thinking about new products and services such as crypto assets, the particular challenge is that they are oftentimes don't fit neatly into existing regulatory frameworks. And so how we regulate them and how we rewire them to make them aligned with public policy goals is a huge challenge of our time.

Tobias Adrian:

But to come back to your question about the volatility and the risks. So there are many benefits, but there are also many risks and public policy in particular, regulation, really aims to balance those risks in a proportional manner to capture the benefits without putting economies or people at risk.

Tara Iyer:

So that makes sense. So that does increase the case for regulation to harness the benefits of distributed ledger technology, as you say, which is quite an innovation, while mitigating some of the risks that come along with FinTech. So in terms of adopting crypto as legal tender, as some countries have done, how would you think about that? And also crypto price, booms and busts... We've seen quite a few of these over the past few years. How do those affect the broader financial markets?

Tobias Adrian:

Yeah, so we are against the adoption of crypto assets as a legal tender. There's one particular country, El Salvador, that has passed legislation to actually adopt Bitcoin as a legal tender. And both in the Article Four concluding statements, as well as in an earlier blog, staff of the IMF very clearly stated that we are not supportive of that move. And there are many reasons to not support the adoption of crypto assets such as Bitcoin as a legal tender. So the first is that Bitcoin is extremely volatile. So it's extremely difficult to plan for say, tax revenues, tax expenditures, to plan economic activity based on a price level that is so volatile. Secondly, there are these financial integrity issues that I already alluded to. It's not clear how much of activity in Bitcoins is related to legal or illegal activity. And finally, it is a complete loss of monetary policy independence.

Tobias Adrian:

So there's really no hope to get back to monetary policy as a policy tool for microeconomic objectives. So we are definitely opposed to adopting cryptos as a national currency. But having said that, we are very supportive of countries that are developing CBDCs, some of which might be developed based on crypto technology. So CBDCs could use ledger technology. It could be permissioned ledgers based on cryptography, that preserve identity. And that could be very powerful and have many of the advantages of new technologies, without the disadvantages of importing the volatility of a crypto asset. So it would preserve independent monetary policy, independence of the central bank, and it would potentially make the financial system much safer.

Tara Iyer:

Thanks Tobias. So following up on that, The White House issued an executive order in March, 2022, on U.S. policy surrounding digital assets. More broadly, there seemed to be initiatives in several countries to regulate crypto assets, to harness their benefits, as you said, while mitigating the risks. What could you tell us about the current state globally of regulation of crypto assets?

Tobias Adrian:

Well, we have called for a coordinated and comprehensive regulation of crypto assets. A globally consistent approach is very important here because crypto of course is a totally global phenomenon. So ideally every country in the world is aligned in terms of how they regulate crypto. So we have many initiatives with papers coming out on this topic. We already wrote certain papers related to the regulation of crypto assets. And we wrote chapters in the Global Financial Stability Report. We are also engaging very deeply with the standard setting bodies in this area, the BIS, the Basel Committee, the

Financial Stability Board, the CPMI, which is the Committee for Payments and Market Infrastructures, and IOSCO, which is the market regulator. So we are working internationally to enhance the supervision and regulation of crypto assets. And the basic idea here is that the access points for crypto assets are these service providers such as Coinbase, FDX, Finance, it's a very highly concentrated market.

Tobias Adrian:

So just five firms have the very vast majority of market share globally. In terms of how the vast majority, hundreds of millions of consumers are accessing crypto assets. And so the idea is to regulate those market infrastructures, with data integrity, operational resilience, prudential oversight, those are all things we understand very well. We understand how to regulate infrastructures and this knowledge can be applied to these entities. Furthermore, stablecoins need to be regulated and stablecoins could be regulated like banks. Certain stablecoins could have banking licenses. Other stablecoins could be more like money market funds. So they could be more like tokenized money market funds. So there's a variety of proposals and approaches, and we are working very actively with the standard setters and with our membership to countries to get to a better place in this area.

Tara Iyer:

Yeah, that makes a lot of sense. Following up on that, we all want to know what the IMF is doing regarding FinTech. What's on the work agenda for 2022 and what are some of the big issues that we are watching in the FinTech universe?

Tobias Adrian:

Well, the FinTech ecosystem is very broad and we monitor developments in the marketplace very broadly. We have ramped up our monitoring massively, and we really do real time surveillance of FinTech today. We also have many analytical products. For example, in October, 2021 and April, 2022, we had chapters in the Global Financial Stability Report on the crypto universe on decentralized finance and the impact on the global financial safety net and the global financial system. We have many FinTech notes and blogs on the topic, including on electronic money, crypto asset regulation, and the supervision of blockchain technology, just to name a couple of examples. And if I count correctly, there are about 10 papers that are in process, just at this point- around the IMF. And probably, that's an understatement- related to FinTech, crypto, digital money, the global payment system, et cetera. So all of this is reshaping the global monetary system and so it is very important for the IMF to be on top of the developments and to contribute to the policy debate. And most importantly, to help our membership take the right policy decisions for the future.

Tara Iyer:

Thanks Tobias. This has been a very interesting conversation and look forward to the next time.

Bruce Edwards:

That was Tara Iyer speaking with Tobias Adrian, Director of the Monetary and Capital Markets Department in the first episode of a new series of podcasts that will focus on all things FinTech. Look for FinTech Forward and all the other IMF podcasts on Apple Podcasts or wherever you listen. And don't forget to hit that subscribe button, if you like what you're hearing. I'm Bruce Edwards. Thanks for listening.