



**Transcript of IMF podcast:**

## **Fintech Forward: Aditya Narain and Marina Moretti on Regulating Fintech**

---

Marina Moretti:

Let me start by saying that regulation of FinTech is there not to stifle innovation, but instead to ensure that consumers and markets are protected.

Aditya Narain:

And without regulation, FinTech has the potential to lead to consumer and market harm, as well as risk to financial stability.

Bruce Edwards:

Welcome to episode four of FinTech Forward. The IMF podcast series that focuses on financial technology, and draws from the expertise of the IMF Monetary and Capital Markets Department.

Tara Iyer:

My name is Tara Iyer, and I'm an economist in the Monetary and Capital Markets Department.

Today, we will focus on everything to do with the regulation of FinTech, and also how we would envision sort of the direction of future regulation on FinTech.

This episode features Aditya Narain and Marina Moretti, who head the Monetary and Capital Markets Departments' work on the regulation of FinTech.

Welcome to this episode Aditya and Marina, and thank you so much for being here. We really appreciate your time. Could you please tell us a little bit more about both the work you do and as well as about the different types of FinTechs that are relevant from a regulatory perspective?

---

**IMF Podcasts home:** <http://www.imf.org/en/News/Podcasts>

**Apple podcast page:** <https://podcasts.apple.com/us/podcast/imf-podcasts/id1029134681?mt=2>

Aditya Narain:

Hi, I'm Aditya Narain and I'm a Deputy Director in the front office of the Monetary and Capital Markets Department, where I oversee the work on financial supervision and regulation, and our work on technical assistance.

Marina Moretti:

And thank you Tara, for having us today. My name is Marina Moretti. I'm an Assistant Director and head of the financial supervision and regulation division, working with Aditya.

Tara Iyer:

Wonderful. We are very excited to have you here with us.

Aditya Narain:

So Tara, the term FinTech can mean different things to different people. So we at the IMF working with the World Bank, we had laid out the Bali FinTech agenda in 2018, which elaborated 12 principles that should be kept in mind by policymakers, so as to balance the benefits of innovation against the risks of FinTech. And what was FinTech there? FinTech referred to technology-driven innovation in financial services. So FinTech can be utilized by all manners of firms, smaller startups, larger technology conglomerates, which we call big tech, and traditional financial incumbents. So when we talk about FinTechs, we aren't actually talking about entities or firms, but about the underlying technology. For example, distributed computing, distributed ledgers, machine learning, predictive analytics and such, and how these are deployed in the delivery of financial services.

Tara Iyer:

That's a lot. That's amazing.

Aditya Narain:

So these entities, which undertake financial services and markets where financial products are issued and traded, they're regulated from a variety of objectives. Prudential, conduct, integrity, all with the broader aim of ensuring a level playing field and ensuring that any risks to the financial system are well managed and losses, disruptions, and incidents of abuse are contained. So by corollary, all entities using FinTech to carry out regulated activities should be subject to regulation, which is appropriate to the entity and to the activity. Now, of course, this gets a little more complicated when FinTech is being used by entities that are not currently subject to regulation. But still- those, they carry out activities that aren't currently regulated, but look very similar.

So crypto assets are a great example. You have new centralized intermediaries like wallets, exchanges and issuers that look like custodians, trading platforms and issuers in traditional financial services, but they aren't yet regulated. In some countries these entities are actually carrying out volumes of transactions, which are comparable to those of local stock exchanges. So this makes the development of new standards and potentially bespoke domestic regulation, very important, but it's not just regulation at the national level which is relevant. Many FinTech activities and related digital products can be issued in one country, stored in another, and accessed from a third. Hence global coordination of regulation is not just relevant, but important.

Tara Iyer:

Thank you so much that makes it clear why it is so important to regulate FinTech and the rise of crypto assets and other FinTechs. Marina, just wondering about your thoughts about why regulation is needed right now?

Marina Moretti:

Well, technology has always been a strong driver of innovations in the delivery of financial services, and regulation has responded to provide guidance on managing the associated risks. What's different this time around has been the scale scope and pace of innovative applications. These applications have been driven by many factors, including the development of new computing methods and technology, the greater affordability and availability of computing, and communications instruments, and the public policy focus on financial inclusion. It is quite correct to say that FinTech is transforming the financial sector landscape with the introduction of new players, processes and products.

Which, is putting pressure on the business model of incumbents. At the same time, recent developments in some unregulated FinTech markets have already raised concerns on potential impacts on financial stability. Calling for a speedy regulatory response. This is clearly the case for crypto assets as Aditya just mentioned. A highly cross-border activity by nature, we are seeing jurisdictions taking very different approaches, ranging from banning certain products and activities to developing detailed regulatory framework. While not every country is at the same stage of market development and jurisdictions of different priorities.

We are seeing the sector grow at a significant pace and interlinkages with the regulated financial system are also on the rise. Within the financial stability risks arising in relation to these assets may soon be systemic, at least in some countries. This calls for coordinated actions on the global stage, since uncoordinated regulatory measures, as Aditya also just mentioned, will lead to fragmentation and create scope for arbitrage. Of course, regulatory priorities could differ across countries. While again,

FinTech is cross-border by its very nature, the global growth of FinTech is rather uneven. Some jurisdictions have a mature FinTech ecosystem, while in others, FinTech might be just limited to a single sector or less. And these sectors might also differ. These are a couple of reasons why it's so difficult to develop global standards for all what we now consider FinTech. So the approach is to remain risk-based and proportionate.

Tara Iyer:

Wow, that makes a lot of sense, Marina. So I was wondering about what the state of regulation is in some major economies around the world and by when would we expect a global coordinated regulatory framework to be implemented?

Aditya Narain:

Tara, that's the trillion-dollar question. So development of legislation and regulation around FinTech is uneven across jurisdictions for the reasons Marina talked about earlier, different levels of development of the FinTech landscape. They determine different risks and different regulatory priorities. So if we, again, take crypto as an example, most of the regulatory initiatives in the major economies have centered around stablecoins due to the speed and growth of the perceived level of risk. So that's, where the focus is. For example, in the US, the president's working group on financial markets released a report last November, outlining key regulatory aspects of a framework for stablecoins. But at the same time, the US Securities and Exchange Commission and the Commodities and Futures Trading Commission, they continue the enforcement activity around crypto assets that are deemed securities and commodities respectively. So there's not yet an agreed regulatory framework for unbacked crypto assets and the related service providers, but bills have been introduced and will soon be in consideration.

In the European Union, the recently agreed regulation on markets in crypto assets, while also focusing on stablecoins, provides a relatively comprehensive regime for the conduct and prudential regulation of the provision of key services related to crypto assets. So right here, you can see that the state of affairs is very different just across the Atlantic. Now, tight restrictions or bans on crypto activities, they exist in a vast number of countries. And these include China, Egypt, Nigeria, for example, and we've also seen targeted bans on crypto derivatives in the UK and Japan. And other jurisdictions are coming up with regulatory regimes for crypto asset activities in varying levels of detail and coverage, and these include Japan, Hong Kong, Malta, Albania, and Ukraine. So you can see that the state of affairs is very different, and the efforts around the world represent this different state.

Tara Iyer:

Absolutely.

---

IMF Podcasts home: <http://www.imf.org/en/News/Podcasts>

Apple podcast page: <https://podcasts.apple.com/us/podcast/imf-podcasts/id1029134681?mt=2>

Aditya Narain:

So we believe that regulatory standards are key at this stage to harmonize minimum elements of regulatory frameworks and the development. And we are working with the global standard-setting bodies to develop cross-sector standards in this space. For us, it's important to use these insights that we gather from our near universal membership and share what we consider good practice, as well as the key risks or the key areas of risk across jurisdictions. In other areas of FinTech, most regulatory frameworks focus on the impact of FinTech in the payment space. In particular, we are seeing the growth of open banking regulations around the world, and this has both advantages and disadvantages.

As you know the aim of open banking is to allow users of financial services to share their bank data with third-party providers- and so, open up a new suite of products and services available to them. Of course, in terms of benefits, putting users in control of their own data is a positive, but there are also challenges to consider. If these third-party providers are not suitably regulated, data protection or data privacy may be at risk. Additionally, we are now seeing the growth of big tech and financial services, and these large tech giants are able to combine the data that they harvest through open banking with proprietary data, to out-compete not only banks but also the smaller third-party providers.

Without reciprocity of data sharing, this has the potential to distort competition and provide big tech with a distinct competitive advantage. So in many of these areas, financial regulation, as we know it may need to be supplemented by other regulatory measures, such as those which are focused on competition policy, to those that may be needed to be developed for consumer data collection and dissemination, as well as those needed to deal with the infrastructure for access and storage like platforms in the cloud, and all of which must take into account safety and privacy considerations. And of course, as with all applications that involve computer interfaces, standards for enhancing cyber resilience will be key.

Tara Iyer:

We were wondering, as we discussed in the last episode, there are different types of digital assets. Central bank digital currencies or CBDC, speculative crypto assets, and stablecoins. So given that there are so many different types of digital assets, how is regulation being designed around these? And is it different for all of these? So could you maybe tell us a little bit more about that?

Marina Moretti:

Sure Tara. So indeed there are different types, including, as you mentioned, CBDCs and backed crypto assets, which is the ones that you call speculative crypto, as well as stablecoins, which are crypto assets that aim to maintain a stable value relative to one or more assets. And each of them will generate

---

**IMF Podcasts home:** <http://www.imf.org/en/News/Podcasts>

**Apple podcast page:** <https://podcasts.apple.com/us/podcast/imf-podcasts/id1029134681?mt=2>

different types of benefits and risks depending on design choices, applied technologies, and so on. We tend to think of central bank digital currencies differently from the rest of the assets just mentioned. So the crypto assets, given that the participants involved are different, and so, the objectives, risk they generate, and regulatory response must be different as well. So I'm not going to speak any further about CBDC here, it is the subject of a separate podcast. So as always is the case, financial regulation needs to be proportionate to the risks, and this is not different for digital assets.

So crypto asset service providers that deliver critical functions should be licensed, registered or authorized. These include entities related to storage, transfer, exchange, or custody of reserves and assets among other participants in this market. Similar to existing rules for financial service providers. Licensing and authorization criteria should be clearly articulated. The responsible authorities also clearly designated, and coordination mechanisms among them well defined. While crypto assets service providers provide several core functions, authorities should consider the risk generated across the entity and across multiple activities. And additional prudential conduct and payment requirements should reflect the nature of these additional risks. It is also important that authorities provide clear requirements on regulative financial institutions, such as banks and insurers, concerning their exposure to an engagement with crypto assets. For example, banking, securities, insurance, and pension regulators should stipulate capital and liquidity requirements and limits on exposures. If regulated entities provide custody services, requirements need to be in place for this function as well.

Now, moving on to stablecoins. This should be subject to robust regulation and supervision. And the key component of the regulatory framework should focus on their reserve assets to address credit, market, operational liquidity and concentration risks. For example, where stablecoins are issued by non-bank entities and are used for payments on a small scale, issuers may be subject to adjusted payments regulation and be overseen by the authorities that have this particular mandate. Where instead stablecoins have less liquid reserves assets, for example, commercial paper or corporate bonds, and are used for investment purposes, such as buying or selling unbacked crypto assets or accessing decentralized finance, issuers should have requirements similar to those applicable to securities and be overseen by securities regulators. Where stablecoins reach a systemic scale, issuers should be subject to comprehensive bank-like regulations. And the systemic issuer should also be required to prepare recovery and resolution plans. Finally, where commercial banks issued their own stablecoins or tokenized their deposit, such stable coins should of course be subject to bank regulations by bank regulators adjusted as necessary.

Tara Iyer:

Thank you so much Marina for providing such a clear demarcation of the differences in regulation between unbacked crypto assets and stablecoins. That really helps us understand the issues surrounding

---

**IMF Podcasts home:** <http://www.imf.org/en/News/Podcasts>

**Apple podcast page:** <https://podcasts.apple.com/us/podcast/imf-podcasts/id1029134681?mt=2>

those. How about neobanks though, in contrast to crypto assets, stablecoins and CBDCs, how should they be regulated?

Aditya Narain:

So I'm not sure if this term existed earlier, but it's certainly been popularized in the FinTech era. So neobanks are often referred to as those banks that provide banking services through digital touchpoints, such as mobile apps. And they use digital technologies to make banking services available on any device at any time, and they tend to target financially underserved clients. So neobanks in most jurisdictions are subject to banking requirements, which can be simpler than the more complex capital and liquidity rules applicable to the larger, internationally active banks. But in some countries, neobanks are also subject to less comprehensive requirements. For example, they're allowed to operate without a banking license or are not subject to liquidity risk requirements, or are subject to different loan classifications and even lower provisioning requirements. So my colleagues had done a case study on neobanks in a recent edition of the global financial stability report and they pointed to several vulnerabilities.

First, there was evidence of higher risk-taking in retail loan origination without appropriate provisioning and underpricing of credit risk. Second, there was higher risk-taking in the securities portfolio. And third, there was an inadequate liquidity management framework. So this is a bit of a red flag. The rapidly changing risks in neobanks require action to tighten and clarify FinTech regulation. Prudential regulations at both the entity and at the group levels would have to be reviewed to address neobanks' key risks in a forward-looking manner. This would likely mean more robust capital, liquidity and operational risk management requirements commensurate with the risks that are taken. And importantly, there are some areas where neobanks should be even more tightly regulated than traditional banks. These for example, are the cyber and operational resilience areas, because unlike brick and mortar banks, where consumers can always enter a branch, if a digital bank's operations were to fail, consumers may not have recourse to alternative methods of banking easily.

Tara Iyer:

And if I may ask, what is the IMF doing regarding the regulation of FinTech?

Marina Moretti:

Let me start by saying that regulation of FinTech is there not to stifle innovation, but instead to ensure that consumers and markets are protected. And where FinTech is growing at pace, also to ensure that financial stability is not threatened. Users should feel safer in the knowledge that they are engaging with a regulated financial institution, and so, certain guard rails exist. So what are we doing here at the IMF? Over the past several years, we have ramped up our work on the regulation of FinTech to reflect both the growing need for supporting this space from our membership, as well as the importance of shaping

and influencing the global debate. In terms of capacity development, we have provided both regional training programs, as well as bilateral technical assistance across each sector impacted by the growth of FinTech, including eMoney and electronic money and payments, digital banking, big tech, crypto assets, as well as the use of FinTech to support firms compliance function, that something that we call RegTech, and the use of FinTech to support supervision, which we call SupTech.

In total, we have provided technical assistance through regional training to more than 50 authorities and more than 200 individuals across all of these topics. And that is just in the past year. In addition, we have also published several FinTech notes focused on regulating FinTech, including on the Prudential regulation of eMoney, the expansion of big tech into financial services, blockchain consensus mechanisms, and the impact of artificial intelligence and machine learning in financial services. We are also working very closely with global standard-setting bodies to help shape and influence the debate on FinTech regulation at the international level. We fit into work being done at the financial stability board, as well as the international standard setters for banking, insurance, securities, and payments. Here, we can be the voice of our near universal membership, and ensure that global standards do reflect the needs of all of our members from advanced and emerging markets to developing economies.

Tara Iyer:

Wonderful. Aditya and Marina, would you have any closing thoughts or advice for those of us interested in regulatory issues? Obviously, it's at the forefront of everything to do with FinTech and we would be very interested in your thoughts on this matter.

Aditya Narain:

Of course, and the market is continuously evolving and therefore closing thoughts from today could be opening thoughts for tomorrow. So FinTech can be a force for good. It can provide greater consumer choice. It can lower costs and increase efficiency in the way financial products and services are delivered. It can promote financial inclusion. It can also help enhance financial stability, but it can only do all of this if the appropriate regulatory frameworks are in place. Without regulation, FinTech has the potential to lead to consumer and market harm as well as risk to financial stability.

Now, regulation can't be an afterthought when it comes to developing and deploying FinTech products and services, it must be a fundamental component at the design stage. This is why regulation for us, isn't a standalone piece, but rather something we embed into a broader work at the IMF on FinTech. And it's something that many regulatory authorities are doing too. So if you're interested in learning more about FinTech regulation, I'd encourage you to read the FinTech notes that we mentioned today. We also have a dedicated FinTech landing page on our website, which brings together the different elements of our



work in one place. With that Tara, thank you so much for your very insightful questions and for your stewardship of this series.

Tara Iyer:

Thank you so much Aditya, and thank you so much Marina, for taking the time and for your very interesting thoughts on the regulation of FinTech.

Marina Moretti:

Thank you.

Bruce Edwards:

That was Tara Iyer speaking with Aditya Narain, Deputy Director, and Marina Moretti, Assistant Director in the Monetary and Capital Markets Department, In this fourth episode of FinTech Forward, the IMF's special five-part series with a focus on all things FinTech. Look for it and all the other IMF podcasts on Apple Podcast or wherever you listen.

I'm Bruce Edwards. Thanks for listening.