



Transcript of IMF podcast:

Fintech Forward: Fabio Natalucci on Financial Stability

Fabio Natalucci:

Although the crypto assets and equity markets showed little correlation pre-COVID, now they've become much more strongly correlated since 2020.

They are no longer on the fringe of the financial system. I think that's an important finding of the analysis. So increased and growing interconnectedness between the two asset classes that could facilitate the transmission of shocks and could be destabilizing for financial markets.

Bruce Edwards:

Welcome to another episode 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:

Today, we will focus on the latest research on FinTech and the associated policy recommendations in the IMF's flagship Global Financial Stability Report, or GFSR for short.

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

The GFSR is an important vehicle for the IMF to survey global financial conditions and provide advice to our member countries.

This episode features Fabio Natalucci, Deputy Director of the IMF's Monetary and Capital Markets Department. Fabio heads our work on the GFSR.

Hi Fabio, and thank you so much for featuring this episode on FinTech in the GFSR.

Fabio Natalucci:

First of all, thank you for having me on the series, it's a pleasure to be here. So I oversee the Financial Stability Report, one of the flagships of the Fund, and the IMF Global Financial Markets monitor. So, we have staff all over the world to follow global markets. And then over the last two years- couple of years, I've been also looking into sustainable finance issues... so the financing side of climate change.

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

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

Tara Iyer:

That's absolutely fascinating. We look forward to having you here. To start with, could you please tell us what the GFSR is and the role it plays in advising our member countries?

Fabio Natalucci:

So the Global Financial Stability Report is one of the IMF flagship surveillance... particularly focused on global financial stability issues. It's published twice a year and the idea is to identify financial stability risks and vulnerabilities while monitoring emerging trends in global financial markets. So we set up a framework where we try to separate shocks. Those could be anything from a financial shock, like the GFC to COVID, to a war, separate from the impact on financial condition indices, which we can track and we produce in-house. And then look at vulnerabilities, both like asset price misalignment, as well as a number of structured vulnerabilities like leverage, liquidity, those are amplifiers of the shock and then we produce what we call growth-at-risk, which is a distribution essentially toward GDP one year ahead or three years ahead. That is accompanied by more detailed analysis on market conditions.

So we look at pricing, issuance, we do deep dives into specific issues. And that's what we call the chapter one of the GFSR. Then we have two analytical and thematic chapters that look specifically at issues that might be relevant, whether these are climate, whether these are non-bank financial institutions. So we have a number of those. And then the last part just is relevant for the Fund, we look at policy recommendations. So we try to have policy recommendations related to financial stability risk or specific issues. This, I think, is particularly important because one of the jobs here is obviously advising our member countries, and so we provide specific tailored recommendations related to financial stability, risk and vulnerabilities.

Tara Iyer:

Thank you, Fabio. As part of the GFSR I agree it's a very, very important product in surveillance, and it'll be great to hear you talk about more of FinTech and the GFSR. So has the GFSR analyzed FinTech before? and what topics has it focused on in that space?

Fabio Natalucci:

So the GFSR looks at financial stability risk arising from various segments of the financial sector over the past few years. So we look at the role of leverage. We look at climate change, whether this is physical risk and equity prices or investment-funded climate. We look at the nexus between banks and sovereign EMs, crypto assets and the rapid growth of FinTech. So the last couple of GFSRs in particular, had two chapters that were related to this. So in October, 2021, we looked at the crypto ecosystem and financial stability challenges. We know that the crypto ecosystem has grown rapidly. There are both opportunities and challenges, and so the chapter looks at the ecosystem, looking in particular, the financial stability challenges post for emerging markets. So crypto assets come in various different

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

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

flavors and evolve over time to meet the various needs for investment, solo value, currency conversion, payments...

We look also at Decentralized Finance, so Defi, which is gaining momentum by offering new services. The crypto ecosystem poses a number of challenges in particular, there are operational and financial integrity risks from crypto asset providers issued to their availability and cross-border activities. There are investment protection risks. There are stability and inadequate reserves, a disclosure for some stable coins, and then also there are micro-financial issues, like what we call cryptoization in emerging markets. So overall, the assessment that came out of the chapter is that financial stability risks are not systemic yet, and I want to stress the word "yet." But they should be closely monitored given that there are global implications and particularly because the operation and regulatory framework in some jurisdictions may be inadequate. That was the October of 2021. Then we had in April of this year, so 2022, we had another chapter focusing on the growth of FinTech, particularly vulnerability challenges for financial stability. FinTech here means technological innovation in financial activities... it's important. It can reduce costs and friction, can increase efficiency, competition, and also can broaden the access to financial services. The chapter focuses on vulnerability and financial stability implications from this FinTech and how those have accelerated through the COVID 19 pandemic. There are obviously... The growth seems to be at times concentrated in risky segments, and so that concentration combined with, in some cases, inadequate regulation supervision can give rise to systemic risk, and potentially, financial stability implications. So that's, as far as the GFSR, right? Then we obviously- we do more work on these issues. So we have started a new series that we have called Global Financial Stability Notes, where we do more of a deep dive on analytical- shorter format, but analytical issues in particular, segments of the financial sector, where we think this financial stability risk may be rising and focus on financial stability issues. So just to give you an example, we recently issued a GFSN or Global Financial Stability Note that found evidence of increased interconnectedness and spillovers between crypto assets and equity markets, that stays in stark contrast to what we see pre-COVID era, where crypto assets were still much smaller.

Tara Iyer:

Thanks. Thanks, Fabio. You mentioned cryptoization, what's the connection with dollarization?

Fabio Natalucci:

So effectively what we do, we look at the adoption of these crypto assets in some emerging markets, and essentially they substitute for local currency, right? So the adoption of these crypto assets may introduce some of the issues that we see, for example, with dollarization in terms of impact on the banking system, in terms of impact for monetary financial stability and monetary policy transmission, and also in terms of what implications there are for macro-financial channel and transmissions.

Tara Iyer:

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

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

Thanks. Thanks, Fabio. Could you tell us maybe a little bit more about crypto and Defi work? and some of the policy conclusions really from this research?

Fabio Natalucci:

So the chapter focused on a few examples of FinTech, right? So one of them is neobanks, right? So neobanks, those are branchless digital banks that acquire and serve customers through websites and mobile apps. So they tend to target financially underserved clients, so younger or lower income or risky borrowers by offering services like deposits and granting them loans... they're mostly unsecured. They've grown in size and probably in systemic importance in some markets and so we found essentially in our analysis, three main vulnerabilities. One, there is higher risk taken in retail loan originations without appropriate provisioning and underpricing of credit risk. The second risk is higher risk taken in their securities portfolios. And finally, inadequate liquidity management framework in terms of neobanks. Then the other part of the chapter focuses on Fintechs in US mortgage markets. There was a case study... We found that FinTech firms not only take on risk themselves, but also put pressure on incumbents, right? So firms that are already there and provide mortgages. The analysis provides some evidence of a negative impact on competitive pressure from FinTech on the income of traditional banks. And then finally, we look at Defi or Decentralized Finance. Those are based on crypto assets, particularly it's a form of financial intermediation based on crypto assets that experienced extraordinary growth over the past two years, offering potentially higher efficiency and investment opportunities. But it's also increasingly interconnected to traditional financial intermediaries. So the size is still small, and despite that, I think under-regulated Defi could post market liquidity cyber risk against a backdrop of legal uncertainties that we have seen in the last few months, significant strain in this market. Now, in terms of policy recommendations, I think one of them is about regulatory arbitrage, right?

There is an increased interconnectedness between unregulated FinTech entities and traditional banks. So there is a need for policies that include regulation of FinTech alongside traditional banks. In terms of neobanks, I think the policy recommendation is that more robust capital liquidity, operational risk management requirements, commensurate to the risk they pose are desirable. And then in terms of Defi, the absence of centralized entities governing Defi is a challenge to regulation, right? There's nothing centralized that you can go after if you want, or you can focus on. So regulation should focus on elements of the crypto asset ecosystem that actually enable Defi, right? So for example, stable coin issuers or centralized exchanges. So authorities should encourage Defi platforms to be subject to robust governance schemes, industry code and self regulation. Now you mentioned before cryptoization, and again, just to be clear, cryptoization is a situation where people start using cryptos instead of their national currency, can be driven by a number of factors.

There are obviously cross-border implications of this. So an approach that focuses on cross-border collaboration, it's important to address technological, legal, institutional regulatory supervisory challenge. One thing that I want to highlight, because there are these cross-border implications, it's important that policymakers implement global standards for crypto assets, right? So that would be

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

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

enhancing their ability to monitor the crypto ecosystem, for example, addressing data gaps in terms of stable coins. As they grow, regulations should be corresponding to the risks they pose and the economic function they perform. And then finally, in terms of cryptoization for emerging markets, obviously emerging markets should strengthen their macroeconomic policies and possibly consider the benefits of central bank digital currencies.

Tara Iyer:

Yeah. Thanks. That's very interesting. So, as you mentioned crypto assets, I know as we've seen really over the past couple of years in the decade before that have grown to be quite speculative products. Could you tell us a bit more of the policy conclusions from the GFSN you mentioned on spillovers between the crypto and equity markets?

Fabio Natalucci:

Yeah. So just to put some context on the analysis, so the analysis here looked at the global financial stability, looked at the extent of interconnectedness and potential benefits for spillovers between crypto assets and financial markets of global financial markets, right? Focusing particularly on equity markets in the US and emerging markets. So the question was one, whether crypto and equity market volatility return were correlated? Second, if so, whether those correlations had increased over time. And finally, do crypto and equity market movements spill over to each other? So what the analysis found is that although the crypto and equity markets show little correlation pre-COVID, now they've become much more strongly correlated since 2020. Importantly volatility in the crypto markets spillovers over to the equity markets and vice versa. So it's a two direction flows and this spillover actually have increased and increased in times of stress in markets.

Now, of course, we need to do more work to pin down the exact channels, but I think one key mechanism that seems to be playing a role here, particularly during times of stress is leverage buyers, right? They place bets on crypto, there could be subsequent fire sales on portfolios liquidated during times of stress. And so this could be... One interpretation, is that because retail and institutional investors are increasingly playing a position in both crypto and equity markets, right? So linking more of the two markets. Now, they are no longer on the fringe of the financial system. I think that's an important finding of the analysis, and so increased and sizeable comovements and spillovers between crypto and equity markets. This is the point, right? Growing interconnectedness between the two asset classes... that could facilitate a transmission of shocks, and in principle, could be destabilizing for financial markets.

Tara Iyer:

Yeah, thanks, Fabio. That sounds very interesting- on the growing interconnectedness between these crypto and equity markets. So switching topics, some of the other topics that you had, which is sustainable finance... We hear that the IMF is doing a lot of work on the economic implications of

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

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

climate change and the transition to a low-carbon economy. Could you tell us a bit more about the role that FinTech plays in this?

Fabio Natalucci:

Yeah. So at this point, I think the transition to a low-greenhouse gas economy is the only path to avoid widespread irreversible damage to the planet, right? I think we have seen just in Europe this summer where the temperatures were- are. So I think this is quite obvious at this point. But it does demand an important deep economic transformation, right? That in part requires also mobilization of private equity at large scale as fast as possible, ideally at least. Now a global financial system can play a crucial role in catalyzing private investment, accelerating this transition. Sustainability considerations around environment, social governance, what we call ESG concerns, have become increasingly embedded in investment strategies, philosophy boosting what we call sustainable finance. The October, 2021 GFSR last year looked at the role the investment fund, in particular, can play in supporting the transition, and we find a number of benefits.

For example, our climate team funds have grown significantly over the last year. At the same time, they also remain small and perhaps they're too small to make a tangible difference to the transition. There are also sort of... they can possibly also be a source of financial stability risk, right? Particularly if the transition is abrupt, it's uncoordinated, that could trigger a rapid shift in investor and consumer behavior, right? So think of, for example, possible setbacks and risks coming from the Russian invasion of Ukraine, right? In terms of going back to coal. In terms of having to redirect the sources of gas, for example. So there could be some of these setbacks. But this is also possibly an opportunity to accelerate the transition toward renewable. The question is whether this transition will be more costly, think of higher commodity prices, issues in having access to some of the minerals, whether this could become more complex and particularly more disorderly.

I think that would be the point that links to financial stability risk. Now, how do we foster sustainable finance? How do mitigate financial stability risk and what role FinTech can play? I think in terms of fostering sustainable finance, there are three crucial steps. One is to strengthen what we call the Global Climate Information Architecture. So data disclosure and classification. Number two, ensure proper regulatory oversight to prevent what is called greenwashing. So selling a product that you think is green when in fact it's not much green. And also, conduct stress scenario analysis particularly when we think about the investment fund sector, not only the banking sector. Now why I said technology can play an important role? I think, for example, thinking about data, right? So bridging the data gap networks on the workstream of the Network for Greening the Financial System.

So this is work that I co-chaired with the ECB, and just issued its final report. One of the highlights of that report is that there are tools such as machine learning, artificial intelligence, that can be used to fill data gaps by making... Some of this scattered information, making them more available to a broader set to the public in a more structured format. And then the other piece of this, of the FinTech,

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

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

is that there is in fact, an increasing number of FinTech firms that are looking how to use technology to tackle some of the challenges in green and sustainable finance. Just to give you an example, the G20 TechSprint in 2021... that was a hackathon-style competition that was launched under the Italian G20 presidency, that showed a number of promising initiatives, aiming to solve problems like collection verification, sharing of data, analysis assessment of climate related risk, as well as connecting projects with investors.

Now, the winners of that competition- there were three winners. One was a portal for corporates, investors and credit institutions to measure alignment with the European taxonomy. One was a climate risk analysis suite of products. And the third one was a platform that would connect funding needs for green home improvements with investors. So I think, to close this point, is new technologies and FinTech in particular can be and play an important role in an effort to lever up private finance and address some of these climate challenges that we all face.

Tara Iyer:

Wow. How absolutely fascinating that is, connecting climate finance with FinTech. So thank you so much, Fabio for your very interesting insights, and we look forward to the next time.

Fabio Natalucci:

Oh, thank you for having me.

Bruce Edwards:

That was Tara Iyer speaking with Fabio Natalucci, Deputy Director in the Monetary and Capital Markets Department in the third 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 podcasts or wherever you listen. I'm Bruce Edwards. Thanks for listening.