

Barefoot Innovation Podcast with Cecilia Skingsley, Head of National Community

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Jo Ann Barefoot: I am so excited about today's program because I am in Basel at the Innovation Summit of the Bank for International Settlements, and I'm here with the head of the BIS Innovation Hub, Cecilia Skingsley, thank you so much for being my guest today.

Cecilia Skingsley: Well, thank you very much and welcome to Basel.

Jo Ann Barefoot: Thank you. This event is incredibly impressive to me. You've gathered people from all over the world, and are showcasing the innovation work that you've been doing at the BIS, and it is really extremely impressive. I've just been amazed by the scope of it, the work on CBDC. We've been talking about climate, we are really doing a very, very broad scope. So I'm thrilled that you're able to sit down with me today.

And I remember we had a lovely conversation as well in Singapore last fall at the Singapore FinTech Festival. Let me start by just asking you to talk a little bit about yourself, Cecilia. What is the journey that brought you to this role? And then tell us about what you're doing here.

Cecilia Skingsley: Well, yeah, that's an interesting story. I didn't plan this, but as you know, you go throughout life and things happen while you make plans. So I've done many different things in life, but I trained as an economist in political science and I was the Minister of Finance in Sweden in the early nineties, where we had a big banking crisis there. I was in charge of all the communications that the government had to produce, on why the crisis happened and what we needed to do about it.

I was a journalist for many years because I thought it was interesting to ask the questions and not only having to be the one who answered them. And then I worked in the financial markets, a couple of rounds in fixed income and ethics research. And then I spent the last nine years before I came to the BIS at the Central Bank of Sweden, the Riksbank, where I was deputy governor. And there I became interested in innovation in payments, because Sweden is one of the countries there, the cash usage has dropped the most dramatically in recent years.

Not a problem necessarily for the central bank in itself, but quite a major change in people's behaviors and I wanted us to have a conversation around that. And in order to kickstart that conversation, I brought forward the proposal that we should issue digital cash, or an eKrona, and I christened it. And that was received

with a lot of curiosity, skepticism, but certainly kicked off an important debate that we are seeing now across the world in many different shapes and forms.

Jo Ann Barefoot: And how long ago did you come to BIS?

Cecilia Skingsley: So I joined the Innovation Hub in September 2022. So it's just a couple of months, but I was part of setting it up from the Riksbank perspective because we managed to secure, in a partnership with the BIS, an innovation center in Stockholm which we call the Nordic Center, which is a collaboration between the Riksbank and the central banks in Iceland, Norway, and Denmark. And then this is a partnership together with the BIS. So it sounds a bit complex but it actually works.

And then the innovation hub has a couple of other centers. So the oldest ones which are now three years, is in Singapore, Hong Kong, and here in Switzerland. The Stockholm and the London Center came alive '21, and this year we are bringing the Euro system alive over their plans also to open one in Canada.

Jo Ann Barefoot: We have had Andrew McCormick, the Singapore hub lead, on the show in the past so I'll link to that in the show notes for this episode. So tell us about the concept around creating these hubs. What are you trying to accomplish? And maybe you've already given us the overview of how many they are, but give us a sense of what the geographic game plan is, as well as the content.

Cecilia Skingsley: So the way I'm thinking about this is that central banks are the authorities that have been given by legislators, the role to maintain monetary stability and financial stability. And in order to provide monetary stability, you have to come out with a good version of money, that's basic central banking operation. And a good version of money meets criteria. Money is the solution to human needs to make economic values portable. And in order to make a good version of money, it has to be a reasonably stable store of value, and an efficient medium of exchange.

And this has been in the controls of central banks across the world for hundreds of years and decades for younger countries. But in essence it's a service you provide to society. And in order to do that, central banks have to follow what's happening in the cyclical aspects of the economy. There are also structural changes. And we seem to be living in a time, a really fascinating time in history when the digitalization is changing how we live, and work, and interact with one another, a more profound way than I think we've done ever before.

So it's not a time to be idle and sit in your hands and think, okay, this doesn't affect central banks. It certainly does. And that was the intellectual starting point for the innovation hub, that following the macro and the microeconomics is not enough, you also have to understand the tech aspects. And in order to do it fully, you have to experiment. And that is what we do. So we look at the technologies and experiment with them, and see how could they possibly change the

financial systems of the world as we know them. But also look into ourselves and say, how can we do a better job in providing infrastructures, and stability, and monetary stability, financial stability for the private sector so they can carry on delivering the financial services that companies, and households, and individuals need.

Jo Ann Barefoot: And what is the model? How are these hubs around the world going about their work?

Cecilia Skingsley: Yeah, what do we do on a daily basis? So each and every center, and there are now... The plan is to have seven running centers. We also should add a partnership, a strategic partnership with a similar activity innovation hub at the New York Fed. So we collaborate a lot with them as well. But it's partnership between BIS on one hand, and the central bank of that particular country on the other hand. And we share a premise, and BIS hire staff and they bring in staff from the host central banks. And we also accept secondments from yet other central banks.

So it's quite a turnover of people. You typically stay in a center for between two and three years, work on a particular project. And the hope is that we bring new knowledge, new findings, creating values in this projects, but also work as a facilitator of improving the innovation mindset also within central banks, because people will work with us for a while and then they come back and hopefully can virtualize their workplaces.

And we have work along six focus areas that our bosses have given us. So it's CBDC, next generation financial market infrastructure, open finance, green finance, sub tech and RegTech, and also cybersecurity, which you have to have in all of these other focus areas. And I would say that the project portfolio, which is about 20 current projects, which are within these six focus areas mentioned, they are a combination of projects that are useful for when central banks and financial supervisors needs to be better at their job. But there are also groundbreaking stuff in there.

And just to give you one concrete example, there are 60 plus and growing, fast payment systems in the world. Sweden has Swish, Brazil has Pix, Switzerland has Twint, et cetera, but they can all be used for domestic payments. And one of our projects, Nexus, is about making it possible for these fast payment systems to connect cross border, so you can make instant payments cross border, cross currency. From people to people, person to person, but also person to business, et cetera. And if we manage to get that going, I think we have done a whole lot of good when it comes to improving cross border payments, and that is a very important political priority in this world.

Jo Ann Barefoot: Can you say more about some of the problems that need to be solved? This is a two-day conference. Yesterday we had quite a bit of programming on CBDC and I know not all of it is publicly announced yet. But I was really struck by the ambition in tackling very, very difficult challenges, as we move to adoption of

CBDC, types of CBDC, and as you say, especially in the cross border segment. But I would love to hear more granularity on some of the problems that need to be addressed.

Cecilia Skingsley:

Yeah, so let me see if I can slice this in the following way. The current system is an ecosystem. So central banks provide the starting point of our fiat money system. So each and every central bank controls the national currency and the issuance of that. And we think about that typically as cash. But in essence, most of the money we hold is in own bank accounts. And over the last couple of decades, the money in the bank account has taken over the role as what cash used to have. And we all think that this is, most of us think it's very convenient, we can pay with cards or various mobile apps. But it's a very complex infrastructure behind the scenes here.

And for me, who works in public sector objectives, thinking a lot about how do we make sure it's inclusive so it works for everybody? How do we make sure it's resilient, it doesn't fall apart that easily? How do we make sure it's efficient? Because payments is not a very competitive industry. You might think it is, but it's... A lot of economists are scared, there's a lot of network effect, it's hard to challenge the current players. And there my simple view is that we need to do, from the public sector side, what we can to make sure the system is innovative. So people's needs are served, it needs to be competitive, but it also needs to be financial stability. And finding the right balance between those three is pretty hard.

But we are addressing this from many different angles, and the outcome of this is CBDCs in different shapes and colors, think about it as next generation money. And it can appear in many different ways. It can appear, for example, in the Enbridge project, which is run out of a Hong Kong center, which is about trying to help national banks providing better services in the cross porter payments, based for companies primarily, but you can think about the wider scope as well, by providing their national currency in a new form.

So basically, update the central bank service to the financial system so they in return can provide better services for their customers. I think that is a possible big thing. Anything that takes away some of the frictions we're seeing, and falls on the speed and make it easier for people to choose, are good things to achieve. And then if you want to make it available for people to be able to hold central bank money, digital CBDC retail we call it, that's a question for each and every country to decide. That's certainly nothing for me or my team, or the BIS to decide. Because money, in essence, is a political thing and I think that should be decided by our legislators in each country.

Jo Ann Barefoot:

Can you say more about the financial inclusion potential? That's been a major theme of conversation about cryptocurrency more broadly, and CBDC. And people talk about it at a high level, but we don't always hear how it may actually trickle down to the user, the day-to-day user.

Cecilia Skingsley: Financial inclusion is definitely a really important part of what we're trying to achieve. If you have a fantastic financial system, but it excludes 10, 20, 30% of the humans, it's not good enough in my book. But I think it's... I'm very humble about this because you can be financially excluded for many reasons. And I think it's become even more complex now when you don't only can be financially excluded, but also digitally excluded. And these things often come together. So I think we work on the public side, need to think about long and hard, how to make it available for the private sector.

In some countries, central banks are very ambitious and say, "We're not going to wait for the private sector to do their job the last mile, but we are going to do it ourselves." I think that's fine. I think in some countries, being a bit more ambitious is a good step to take, but everyone has to make their own decisions. But if we can improve the current structure, I think we can build in more trust, and hopefully make it easier for people to onboard. It can be also a question of education, but it's certainly a question of trust.

And for me it's a failure every time someone who needs financial needs to be covered, need to go to someone who is unregulated, or to a crypto provider. It means that those of us who work in the fiat money system need to shape up and do a better job basically.

Jo Ann Barefoot: Could you talk a little bit about the climate work that you're doing?

Cecilia Skingsley: Yeah, so I think there are two really fundamental... I mean there are a ton of issues the world need to address, but two where we really need to collaborate. One is the digitalization because technology has no boundaries, so we might as well, we need to collaborate across borders. But climate is the other one where cross-border collaboration is the only way forward really. You could do a lot of good stuff in one country, but if there are problems around the corner, you won't be very satisfied in the end anyway.

So a lot of good work is done in this area. We try to think about what can we add from our perspective. And so we are doing projects in the Euro system where we are saying, can we, through machine learning, be better at scrutinizing what companies actually report? There is still a lot to be done in terms of taxonomy and standardization, to understand what achievements do actually companies come up with. And we've had a very interesting workshop pointing out that a lot of knowledge is in the dark here, or we don't have the proper knowledge. And getting the right information is key to steer, or can influence the financial players to make the right decisions basically.

And then you might ask, well who am I to say what is the right decision? And that's up to other agents in the world. But we have seen that there is a lot of confusion around data in this area, that we would like to support with. And one of our projects that is coming out from a Euro system, is called Gaia. It's about using machine learning to see can we do a better job at canvas out the data that is coming from companies, disclosure of environmental work. So say for form

analysts, but also decision makers, are they doing the right things? Are they progressing? Is there a need for a nudge, et cetera.

Jo Ann Barefoot: We saw a presentation this morning on Gaia and it was one of the most exciting things I've seen in the climate space, in terms of the potential to gather information, and be able to begin to understand what data is really telling us. There's such a challenge in just getting the right information, and standardization of ways of looking at things. So very, very exciting. You also said that one of the focus areas is RegTech and Soup tech. Can you talk more about that?

Cecilia Skingsley: Yes. So technology makes the financial sector change very quickly. And one example of that is when I started working in the investment banking trading rooms in the nineties, market making was done by humans. And if central banks wanted to know and others wanted to know, okay, how is pricing going? What's the liquidity, water depth, et cetera? You called the market makers and you got a rough picture about what was going on.

Now a lot of these processes are automated through computers and so basically, there's not many to call anymore. And our answer to that is we have come up with the product we call Rio, which is a ethics liquidity monitoring device, which makes it easier for central banks, front offices and ultimately their governors to monitor in real time, okay, what is the response in the market from our policy decisions? From some data? Other events that is happening?

The financial markets plays a crucial role for central banks in terms of seeing how does the transmission mechanism actually work? Are we achieving the effects in the effects and the fixed income market that we want to achieve? And then you have to have access to really good data, and Rio is one of our suggestions in that area.

Jo Ann Barefoot: I found myself, as I watched the Gaia presentation this morning, thinking that those methodologies have a lot of potential for soup tech, the potential for getting better ways of gathering data, taking unstructured data and getting it into formats that can be analyzed. And it's so exciting to see the technology breakthrough, some of which are developing so quickly. It's really, really striking.

Cecilia Skingsley: No, it is. And it can be feeling a bit daunting to know, okay, everything is changing, how do I navigate in this new world? We try to be helpful in that, and be a guide. We are appreciating that there are many other guides out there as well. But take Ellipse for example, which is basically a database that will make it very user-friendly, we hope, for supervisors to bring in the data from banks and others that are under their supervision. To build exactly the dashboards that they need to be able to monitor things in real time.

Jo Ann Barefoot: Our listeners know I'm a former bank regulator, I was deputy controller of the currency and I always say that regulators have the hardest job in the technology

change that we're dealing with. They don't have the luxury of getting things wrong, and it's not a criticism to say they're not known for innovation, even though there's been innovation in the regulatory system forever. The cultures in financial regulation aren't necessarily conservative and careful as we want them to be. How do you think about that challenge? I mean you're bringing really striking tech innovation into this institution, which most people would imagine being a bastion of conservative thinkings. What's the...

Cecilia Skingsley: Well, first of all, I don't think being risk averse or conservative is necessarily bad.

Jo Ann Barefoot: No, I don't either.

Cecilia Skingsley: If you are in charge of running a financial system or supervise it, you should be very careful because it means a lot of difference for people's lives if it works, depending if it not works. So I think the mindset is a good starting point, but I think you could do both at the same time actually. And the way I found really good way forward, and I would really encourage other institutions to look at the same option, is to separate out a couple of people in a separate IT environment. And I think this is more critical than you first think when you think about it.

Because if you have a separate IT environment, you can build sandboxes, you can bring in private vendors, you can experiment, blow up things in our world and it doesn't affect the day-to-day activity of the central bank, or the supervisor authority where you're working. So having a separate entity, a separate group with a separate IT environment, is very useful. And then you can tap into a growing network of other innovation activities, authorities. And I have a lot of visits not only for central banks, but also from supervisors who are saying, "Yeah, we want to do the same thing, but how do we do it?" And I think you can be conservative in your day-to-day activity, but you should allow for a couple of people to run ahead in a separate environment and say, "Okay, how can we do our things better? What are others doing? How can we collaborate?" And that's much easier if you set these resources aside.

Jo Ann Barefoot: Yeah, I couldn't agree more. Creating this safe space for experimentation is so key. And again, you're doing it so brilliantly, I've just been so impressed with it. Do you know how these changes will then be integrated into the system? Can you picture that?

Cecilia Skingsley: Well, that's a million dollar question. So my mantra here is, I say, we can showcase, we can identify problems, frictions, room for improvements and showcase what could be done. But it's up to legislators, and executive forces in each country, to decide what should be done. And there the world is developing in good ways and less good ways. So who knows? But I think there is power in the showcasing, and saying, "This is what we can do if we come together and collaborate."

International collaboration is hard, but I think there is more that joins us across countries, and across central banks and across financial authorities, because people's needs are cross border. And then we just have to update ourselves, upgrade ourselves, because it's a failure if people don't have the services they need at the time they need, and with a reasonably fast execution. So we'll work on this and we make proposals, we are ready to take criticism. The more successful we are, the more pushbacks we'll probably get for those who doesn't want to change, but that's part of the job. And you have to go back to the drawing board and keep coming back and hope for so much humans in the end.

Jo Ann Barefoot: Is there anything we haven't talked about that you would like to add?

Cecilia Skingsley: No, just to say that Rome wasn't built in a day which is a saying in Europe where I come from, but we certainly need to try. I think there is a lot of great things happening also outside headlines. This is not about, I would overreach, try to take over the role of the private sector. The private sector will always be much better than people like me, to know what clients really need. What we can provide is structure, regulations, platforms, infrastructures that are as open as possible to allow for this innovation, in the private sector to carry on and also competition.

But also always keep in mind out for making sure the financial stability works. And sometimes we may have to, on the public sector, nudge the private sector into a new place. But once that has happened, we can get out again and play it more of a regulatory supervisory role. It is an exciting time, I think, to live in. I think we could do a lot of good things in terms of helping people having better access and usage of financial services, and it's a great journey to be part of.

Jo Ann Barefoot: If people want to learn more about the BIS innovation hub, where should they go?

Cecilia Skingsley: The easiest thing is to get into the [bis.org](https://www.bis.org), the webpage, and scroll down for innovation. And we are also on LinkedIn, and follow the various media outlets that we have.

Jo Ann Barefoot: Wonderful. Cecilia Skingsley, thank you so much for being our guest today. It's been fantastic.

Cecilia Skingsley: Thank you very much for having me.