



Jim Tebrake:

Any fund report, any working paper, the starting point for all of that is data.

Bruce Edwards:

A lot goes into ensuring a stable global financial system, which is what the International Monetary Fund is all about. But while monetary and fiscal policies often steal the show, data and statistics are the unsung heroes behind the scenes.

Jim Tebrake:

Data is at the foundation of a lot of what we do here at the fund. I think if you look at any fund report, any research project, underlying all of that is good data, good quality data.

Bruce Edwards:

So what happens when technology can change the types of data that financial institutions need, virtually overnight?

Jim Tebrake:

It's not unfathomable that the world of digital money could change quite quickly. And we should be prepared as statisticians to make sure that we have the mechanisms in place to collect the information that we're going to need, to understand what's going on.

I'm Jim Tebrake. I'm the Deputy Director in the Statistics Department here at the IMF. And my responsibilities in the statistics department center around data and methodology, or how we put the data together.

Bruce Edwards:

Jim Tebrake and his team are trying to find ways to close some of the data gaps that have been growing in recent years. And the IMF's Annual Statistical Forum in November focused on the challenges brought on by digital currencies.

All right. So before we dive into data gaps, let's talk about how data fits in to some of the pressing issues for the global economy. How does data play into climate mitigation, for example, or the energy transition?

Jim Tebrake:

Well, if you think about it, data is probably more important than ever during a time of crisis. So if we think back to the pandemic, in many ways, we all became a bit of data nerds. We started to look at graphs, we started to get interested in case counts, vaccination rates. We became experts in all of these different things. And we're now entering into things like a climate crisis. And what people are looking for are data that will help them understand the problem, help them monitor what's going on. And certainly, policymakers are looking for data, good data that they can trust.

They're also looking for data that help them advocate for policy change. And I think that's one of the most relevant things and important things around climate, is that we know that we are going to need to stand up really important policies. Policies that allow us to transition to a different energy system, that might involve things like taxation, implementing carbon taxes. Well, data is one of your best advocates for change. If you can show people, quantify to people what the situation is going to look like, if we don't do something now,



they'll have a greater understanding and they'll also be more willing to allow these policy measures to be implemented. And so I think, as I mentioned, data's at the foundation of what we do. It's the starting point in many regards.

Bruce Edwards:

And so how much of the data that the IMF uses for its research is actually IMF data?

Jim Tebrake:

That's a good question. We are producers of data, certainly. But the majority of the data that we get comes through this really interesting network of official statisticians across the globe who undertake, day after day, put out economic reports, economic statistics, environmental statistics, tracking what's going on. I often like to think of it as they're like the economic historians telling the story, the economic story, of what's going on each and every month. And so most of the data that we receive come from our member countries, where they have national statistics organizations, statistics departments within central banks, who are charged with producing a range of economic and financial statistics and increasingly, environmental statistics.

Bruce Edwards:

So the Fund is part of this global data-collecting community, in essence?

Jim Tebrake:

Exactly. And not only are we part of this ... Collective data, but we offer extensive support in helping countries produce data. We also set up the standards, the manuals, the guidebooks on, okay, well how do you calculate balance of payments? How do you calculate GDP? How do you calculate air emissions accounts? We support countries through our Capacity Development program to stand up these numbers to ensure these numbers are high quality, ensure they're comparable across countries. And in turn, we get to provide these data to the rest of the Fund to support the different activities, whether it's our surveillance work, whether it's our lending activities. But again, always at the foundation of what's being done here.

Bruce Edwards:

How interesting. So the fund actually hosts a data forum every year where statisticians like yourself come together, discuss ideas. What do you think is top of mind for people at the moment, given what you heard during those few days of the forum, in terms of the critical areas that people think the lack of data is really holding things back?

Jim Tebrake:

Right. So yeah, each year we host a statistical forum. The statistical forum brings together statisticians, policymakers, academics, sometimes industry. So it's a really great venue to explore different issues and different measurement issues. And this year's forum was all about measuring money in a digital world. Looking at things like the emergence of CBDC's, cryptocurrencies, stable coins. How are we going to measure all this moving forward? What are some of the policy issues around these different things and the data needs of the policymakers?

It was a really fascinating two days. I think what we wanted to explore at the forum was if, in say a year's time, you and I are buying our groceries with the latest cryptocurrency... will we have the regulations in place,



the tools in place, to measure what's going on, to understand what's going on? So for me, this forum was about understanding the issue and seeing how we could prepare ourselves from a policy perspective, from a regulatory perspective, and then from a data perspective, if we end up in a world where things are completely different than they are now, and we're exchanging goods and services using a totally different means of payment.

Bruce Edwards:

And so what do you think are the hardest aspects of digital currencies in terms of data collection? What is the most challenging thing about collecting data around digital currencies?

Jim Tebrake:

Yeah, the most challenging thing, and take something like Bitcoin, is that by design, it's hidden. It's meant to be hidden. It's meant to be absolutely anonymous. And in fact, Bitcoin, in some ways, nobody issues Bitcoin. So even if you wanted to know, okay, what was issued in the last year, there's nobody you could directly go to and say, "Hey, can you tell us how much was issued?" There's no administrative data source you can go to that tells you who's holding a Bitcoin, certainly not where they live.

So the fact that by design, it's meant to be anonymous, makes it very challenging for a statistician to measure. Also, the decentralized nature of it. So you think of something again like Bitcoin, where it's really just a network of individuals, a large network of individuals who are part of the ecosystem. Well, if you want to try and understand the lay of the land, there's hundreds of thousands of people that you'd have to connect with just to understand what's going on. Whereas with fiat currency, it's much easier. You can go to the central bank, it's one respondent that you need to survey. Information is there readily.

Bruce Edwards:

They've been collecting data very well for many years.

Jim Tebrake:

For many years, exactly. So I would say those are the two big issues. One is that a lot of these are anonymous by design. And then the second is really the decentralized nature. Maybe one thing I'll add on CBDCs, because they pose less of a challenge, although they still do pose a challenge. CBDCs, at least if a central bank's issuing it, we can go to them. We can ask them, "Okay, how much did you issue?" And we can also ask them, "Who did you issue these two? Who holds these? Who are the account holders?" And we can also ask where those account holders reside. And that's fine for the central bank that issued the currency. But then think about if say somebody in Europe issued the currency and you and I and decide we want to have some of that currency. Well, the European Central Bank that issued the currency would know that you and I in the United States hold this.

But there's no real reason why the Federal Reserve here would know that you and I are holding these foreign CBDCs. And that's a bit of a blind spot. So if we want to address that moving forward, what we need to do is we need to make sure as statisticians that the central banks that are issuing CBDCs share information with, if you would, the receiving country of those CBDCs, if they cross borders. And so I think moving forward, in order for us to do a good job measuring digital money, if you would, requires an enhanced set of sharing of information, aggregate information. Not personal information, but aggregate information across borders. And then at least we'll have some lens into what's going on.



Bruce Edwards:

I was going to ask you about that because digital currencies, as complicated as they might seem, have the potential of improving cross-border payments, which have long been problematic. And the challenge as you were describing it is this communication between countries, which has been challenging since the beginning of fiat currencies. How do you think that a more integrated global monetary system through these digital currencies might work with CBDCs, for example? Are you optimistic, first of all, that that is actually going to happen?

Jim Tebrake:

I'm quite optimistic that the data sharing will happen. I think that central banks who are issuing CBDCs will quite soon understand that while they have a good understanding of what they've issued and who holds what they issued, they're also concerned about what residents in their jurisdiction are holding CBDCs from other central banks. And the only way that they're going to get that data is if they receive that data from the foreign central bank. And so there'll be a natural incentive to share information across borders. "I'll let you know what's going on in our central bank as long as you let us know what's going on in your central bank." And in many ways, we can mirror these statistics together, to get a really good understanding of what's going on globally. So I think there's an incentive built in that would allow this to happen. One role that we can play as the IMF is that we can facilitate this exchange of information across the banking sector, so that everybody has a good understanding of the lay of the land.

And that's one of the strengths of the IMF, is this convening power that we have. And this ability to stand up solid methodologies, solid report forms, produce comprehensive statistics, comparable statistics. So we're well positioned to play, if you would, a brokering role between these different central banks, to allow for this exchange of information. We do something similar in other areas. We do something similar with our portfolio investment statistics, our direct investment statistics, where essentially we provide a comprehensive database that shows all the different flows from one country to another. And it's been quite useful in understanding the flow of capital across borders. And so it's going to be very important as this whole ecosystem evolves, and as regulations begin to be stood up, that the statisticians are around the table as well. And that we're designing a statistical infrastructure that allows us to collect the necessary information, aggregate it, and then provide it back to users so they can understand what's going on.

Bruce Edwards:

And as this thing evolves, every once in a while, to look back to see what has worked and what has not worked.

Jim Tebrake:

Yeah, exactly. I think this whole thing is going to be a learning process, and there's going to be stops and starts. And we're going to think that we've in some ways solved everything, and then we'll wake up tomorrow and the world has changed. And I always think back to when Open AI came up with ChatGPT, we-

Bruce Edwards:

Which is not so long ago,



Jim Tebrake:

Which is not so long ago. So it's not unfathomable that the world could change quite quickly, and the world of digital money could change quite quickly. And we should be prepared as statisticians to make sure that we have the mechanisms in place to collect the information that we're going to need, to understand what's going on. That was for me, the main takeaway of the forum. And also that any information that we're going to collect moving forward, is going to really need collaboration across borders and collaboration between the regulators, the statisticians as well, to ensure that the right information is being collected.

Bruce Edwards:

And the IMF has the advantage of having worked with central banks across the globe for so many years and have established relationships with central banks and the fund. The fund has something to offer in those terms, right?

Jim Tebrake:

Exactly. We're extremely well positioned. As you said, we have a network both in the statistical world, certainly on the policy and the regulatory world that we can tap into, that we can in many ways bring together. And it's a global network, so our membership covers pretty well the entire world. And so I think moving forward is quite promising in terms of what we could do in this area and the role that we can play as an institution.

Bruce Edwards:

Jim Tebrake, Deputy Director of the IMF's Statistics Department, thank you so much.

Jim Tebrake:

Thank you very much.

Bruce Edwards:

Again, the IMF hosts an Annual Statistical Forum where experts from around the world come together to discuss new ideas. You can check out the latest one, *Measuring Money in The Digital Age* at [imf.org](http://imf.org).

And you can hear more IMF podcasts on Apple Podcasts or wherever you get your podcasts. You can also follow us on X, which used to be Twitter, [@IMF\\_podcast](#).

I'm Bruce Edwards. Thanks for listening.