



## Remarks on digitalization of money and future challenges

Good morning ladies and gentlemen, today's first session will discuss the digitalization of money and the future challenges. When thinking about the future of money, it's important to think about the history; and the history of money has always been linked with the history of technology.

A big invention was the idea of balance and double entry book keeping. This allowed for the emergence of banking and banks. Banks became places where all the various credits and debits of society came together in a single register. And again, banking led to the invention of central banking in the 17<sup>th</sup> century. In return for lending gold to the sovereign, the Bank of England acquired the right to print paper money, which could then be used by the people to pay their taxes. In a sense, this was the origin of the modern monetary system!

It would be fair to argue that over the last 300 years things didn't change that much. We have had ups and downs, booms and busts, but the basic principles of banking have remained remarkably similar.

Yet, over the last 10 to 15 years we are witnessing a spectacular development of computing technology. So now we have FinTechs, a global spread of innovations in electronic payments and – of course – crypto assets. What I am trying to say is that payment behavior has started to change.

This development in payment systems is extremely relevant for central bankers. So before I hand over to our speakers, let me say just a few words about the point of view of the Austrian Central Bank on this matter.

There are 3 key points:

1. At the top of our agenda is the implementation of an independent

European Instant Payments System, a system which will help us to better control credit transfers in the euro area and to keep big data in Europe.

2. At the same time, we are convinced that we will still need cash in the future. Cash contributes to consumer protection – especially in a digitized world – and cash is great in a crisis.
3. What about bitcoins and central bank digital currencies? Well, the key word for our central bank – which might surprise you – is caution. Caution is the sense that we don't see crypto assets (bitcoins) as alternative to established currencies but more as vehicle for speculation. And caution in the sense that the issue of central bank digital currencies could interfere to much in – what you might call – commercial banking activities.



But let me now come to our speakers.

I'd like to welcome very warmly Mr. *Ulrich Bindseil*. Ulrich Bindseil has been Director General of Market Operations at the European Central Bank since May 2012. Before joining the ECB, he had worked for the Deutsche Bundesbank (1994-97) and the European Monetary Institute. He chairs the ECB's Market Operations

Committee, the Money Market Contact Group and the Bond Market Contact Group. He is professor at TU Berlin and is author of many academic papers. This morning, he will talk to us about one form of central bank digital currencies and discuss its pros and cons.

And our second speaker is *Andrei Kirilenko*. Andrei Kirilenko is currently the Director of the Centre for Global Finance and Technology at the Imperial College Business School (London). Before he joined the Imperial College in 2015, he was Professor of the Practice of Finance at the MIT Sloan School of Management and Co-Director of the MIT Center for Finance and Policy. His

work focuses on the intersection of finance, technology and regulation. He is a recognized world expert on technology in markets, including algorithmic and high frequency trading. Between 2010 and 2012 Professor Kirilenko served as Chief Economist of the U.S. Commodity Futures Trading Commission (CFTC). Today he will present a risk-based classification of crypto assets. In particular, he is going to discuss the following:

- What fundamental economic problem do crypto assets solve that fiat currencies do not?
- Which assets will survive?
- What are the regulators up to?

