## **Blockchains and Cryptocurrencies: fad or game changer?**

On May 21 Faculty of Business, Economics and Statistics of the University of Vienna had a great pleasure to host a Panel Discussion about Blockchains and Cryptocurrencies. The discussion was in the form of a dialogue between OeNB Visiting Professor Bruno Biais and Ewald Nowotny, Governor of the Oesterreichische Nationalbank. Professor Biais took the role of a proponent of the financial changes, while the Governor defended the tasks of central banks (CBs) all over the world. First of all, interlocutors stated three main topics that they wanted to tackle. Namely, how blockchain technology works and whether it works properly at all; how cryptocurrency is related to blockchain and its place in modern finance, and the use of blockchain in a broader perspective (e.g. smart contracts).

Bruno Biais is convinced that due to blockchain the world of banks is going to change a lot in the near future. Blockchain provides a decentralized database, or "digital ledger", of transactions that everyone on the network can see. This network is essentially a chain of computers that must all approve an exchange before it can be verified and recorded. Thus, neither governments nor institutions are needed. Nevertheless, Professor Biais has a moderate view on the technology and believes that we can not get rid of institutions completely, but they will have to be changed according to the society needs, such as implementing artificial intelligence or make use of digital currencies. However, his opinion was that in some countries like Zimbabwe or China, where little trust in the government and bank sector is seen, it is possible to roll out the radical scenario with blockchain replacing both banks and CBs. In other words, Bruno Biais doubts the assumption that the money, as we know it today, is really a save asset. The value which is given to the currency is just a common belief in its power and its monetary worth, while if citizens stop trusting governmental promises, the money loses its value. That is the reason, why the guest speaker sees cryptocurrency as a challenge for CBs to maintain the benchmark, set by virtual currency like BitCoin, to judge their work and efficiency. Furthermore, Professor Biais explained, that the needed scarcity of the cryptocurrency is provided by the initial protocol of the computer code which is implemented into it. However, if the majority of currency miners agree to change the rules of the game, it can easily be done. That means, that human decisions play the ultimate role in the blockchain technology and raises the question of whether the position of the minority should also be taken into consideration.

Ewald Nowotny started the dialogue by presenting some interesting statistics from the latest survey which suggests that 90% of millennials in Austria use online banking and even that half of them do not go to the bank at all. However, 70% of the whole population in Austria is convinced that the currency should stay as it is. Speaking about the blockchain technology, he underlined, that the payment system and not the cryptocurrency itself was the issue that worried him most. The Governor took Finland as an example. There the local government gave up on constructing its national payment system and introduced "Alipay"

which is a Chinese payment system. The question of national security has to be addressed, as the system requires a lot of data and access to this data is a very sensitive issue. Thus, there is a strong need to develop a European payment system that will be definitely extremely costly but will be cost-efficient due to the use of economies of scale in the long run.

Furthermore, CBs do not see cryptocurrency as a currency at all, thus there should not be any rivalry between it and the monetary base with deposits. However, there is a perspective of adding CB cryptocurrency to its assets. In this case, even individuals are expected to have direct access to the CB virtual currency, which also means that monetary policy will become far more easier to manage. Finally, Ewald Nowotny raised concerns about cryptocurrencies in terms of possible criminal activities such as money laundering and in terms of inefficient energy consumption during the mining process.

All in all, it was a hot debate with numerous insights from the professionals in their fields which made it possible for everyone to deepen his or her knowledge in the areas of blockchain and cryptocurrency and better understand the interdependence between them.