Flick Gocke Schaumburg

Dr. Robert Müller, LL.M.
Wissenschaftlicher Mitarbeiter
Robert.Mueller@fgs.de
T +49 228 9594-441
F +49 228 9594-100
Fritz-Schäffer-Straße 1
53113 Bonn

5. November 2021
Unser Zeichen: Xmro/kle
5334200v1

Public Hearing on 9 November 2021 - European Parliament Subcommittee on Tax Matters (FISC) on "The impact of new technologies on taxation: crypto and blockchain"

Dear Mr. Chairman, dear Members of the FISC Subcommittee,

Thank you for your invitation for me to share my views on "the impact of new technologies on taxation: crypto and blockchain". I am delighted to provide you with my answers to your questions in my capacity as a tax, and blockchain researcher, working at the tax consultancy & auditing firm "Flick Gocke Schaumburg". It is an honour to be able to share my experiences and major-research results with you, gained over the past five years of my research.

I. Introduction

Blockchain technology now has outgrown Bitcoin, the cryptocurrency. Indeed, it has the potential to be applied in all industries. The aim of this paper is to identify its potential and challenges it faces. As well as this, I wish to highlight the framework of blockchain technology in tax law and to present recommended solutions for stakeholders.

In the future, blockchain technology will enable more direct, and trustworthy communication between a country´s tax authorities and its taxpayers.

Blockchain technology is particularly suitable for high-transaction taxes, determined and audited in large procedures. When we talk of indirect taxes, these include value-added tax, customs duties, and other consumption taxes (e.g., energy taxes). In direct taxes, blockchain technology supports transfer pricing, withholding taxes and payroll taxes. One may be surprised to learn that blockchain technology has already found its way into tax law via pilot schemes and early applica-

Flick Gocke Schaumburg

tions. It is important for this positive development to be further strengthened and cemented into the way we do things. To achieve this, one must satisfactorily and proactively answer a wide range of questions for both legislators and taxpayers alike.

Tax law is becoming increasingly international in its outlook. As a result, tax communication and management in the bidirectional relationship between taxpayers and tax administrations could be improved in situations where cross-border events take place. Given this, a multinational system is needed if we want to facilitate trustworthy cross-border communication with individuals and companies. This will lead to improvements in the efficiency and speed of tax processes, help save resources, and better prevent tax fraud. The new blockchain-based concept of self-sovereign identity could provide a technical framework for various tax compliance use cases.

II. Building a modern multinational tax identity and document management system

In addition to making information on the internet secure form being tampered with, blockchain technology also provides the opportunity for a modern and self-determined identity and document management. Currently, management on the internet (of any kind) is often application centric. For example, users have to register via a password and a username. It is also often not known how the data provided is handled and dealt with. With the aid of the self-sovereign identity concept, users can independently decide on what happens with their data while being simultaneously clearly identifiable on the internet. For eGovernment and tax applications, it offers the opportunity to communicate in a trustworthy manner when it comes to tax-relevant documents independent of the use case.

Clearly, tax authorities could operate more internationally. At the same time, taxpayers would benefit from communication channels and processes being both much more efficient and quicker between the tax-relevant parties (entrepreneurs, banks, tax administrations, auditors, etc.). With a unified identity and document management system, the problematic creation of separate tax blockchain applications and new data silos could be avoided.

Identification verification (“credentials”) is made possible via blockchain-based signature systems (“verifiable credentials”) and provided by issuers. This enables a document (e.g., invoices, tax assessment, certificate) to be confirmed as true for third parties (“verifiers”). Credentials are assigned to a digital identity (“decentralised identifier”, or “DID”).

A suitable European framework can be provided by the European Blockchain Service Infrastructure. To do this, legal standards for the use of blockchain technology must be created. These standards should be formulated in a way which are technology-neutral and the exact technical implementation should be left to practitioners. A decentralized technical framework should be specified by law, stipulating the stability of information and including a forgery-proof recording system which records the data in chronological order. It would also protect it from unauthorized

Flick Gocke Schaumburg

deletion and subsequent modification. At the same time, it should be possible to correct information.

III. Emerging use cases of blockchain technology

All use cases and the outlined applications ensure that the topic receives the necessary attention. They also confirm that the potential of blockchain technology in tax law is now recognized. It is becoming apparent that use cases and applications could be developed in VAT, especially in combating VAT fraud. Blockchain use cases in VAT can be roughly divided into three categories:

- Tamper-proof transmission of VAT-relevant data; blockchain-based e-invoicing
- Replacing VAT with a native VAT "cryptocurrency" or token

The COVID-19 pandemic has shaken the global and European economy. Governments across Europe are trying to help companies and their citizens to navigate the crisis using government aid and other countermeasures. This requires money. However, instead of increasing taxes to finance government stimulus programs, new technological tools can help increase revenue by combatting tax evasion. VAT evasion is high in Europe. And VAT compliance requirements are a challenge for taxpayers. The digitization of VAT functions and the expansion of VAT reporting is already an international and European trend. Acquiring real-time information by digitalizing invoice and other VAT-relevant information can help successfully enforce VAT liabilities and simplify compliance requirements.

The digitalization of VAT processes through private state cooperation has already been demonstrated in the People's Republic of China. This also offers potential for taxable persons to meet their VAT compliance obligations more easily. Hence, there is a need to transform VAT processes in Europe for a digitalized, automated future with the help of blockchain technology.

IV. Ecological aspects of blockchain technology

Arguably, humanity´s main challenge today is the climate emergency. In this respect, blockchain applications cannot generally be compared with the cryptocurrency Bitcoin, which has a high carbon footprint. The technological potential of blockchain technology in tax law must not lead to high energy consumption or a large carbon footprint. The high energy consumption of cryptocurrencies such as Bitcoin, is caused by the fact that the validation or consensus mechanism "Proof-of-Work" to secure the network requires high computing capacities and energy, as a result. In blockchains, however, there are many other consensus mechanisms, for example "Proof-of-Stake" or "Proof-of-Authority". These are used to secure the integrity of a blockchain while having very low energy consumption. Such energy-saving consensus mechanisms are suitable for tax law and reduce the overall ecological footprint by digitizing tax processes. As a result, discus-

Flick Gocke Schaumburg

sions on blockchain tax applications cannot be slowed by those referencing the energy-hungry Bitcoin. To assess power consumption, each blockchain application and its design must be evaluated individually. Overall, the digitizing of tax processes, including through blockchain technology, can reduce electricity consumption as well as the environmental footprint in this sector. Crucially, resources can be saved and efficacy can be kept by simply by reducing the use of paper and the need for processing. Examining and developing tax blockchain applications are therefore needed.

V. Summary

In summary, blockchain technology offers the opportunity to enable greater convergence of European tax authorities and increased cooperation with taxpayers. Simultaneously, it can help secure tax revenue for governments by combatting tax evasion, making it easier for taxpayers to comply with their obligations. To achieve this, we must provide a suitable legal and technical blockchain infrastructure. Europe cannot afford to miss the technological boat. Instead, it must proactively expand the deployment of disruptive blockchain technology in the public sector.

Kind regards

Dr. Robert Müller, LL.M.