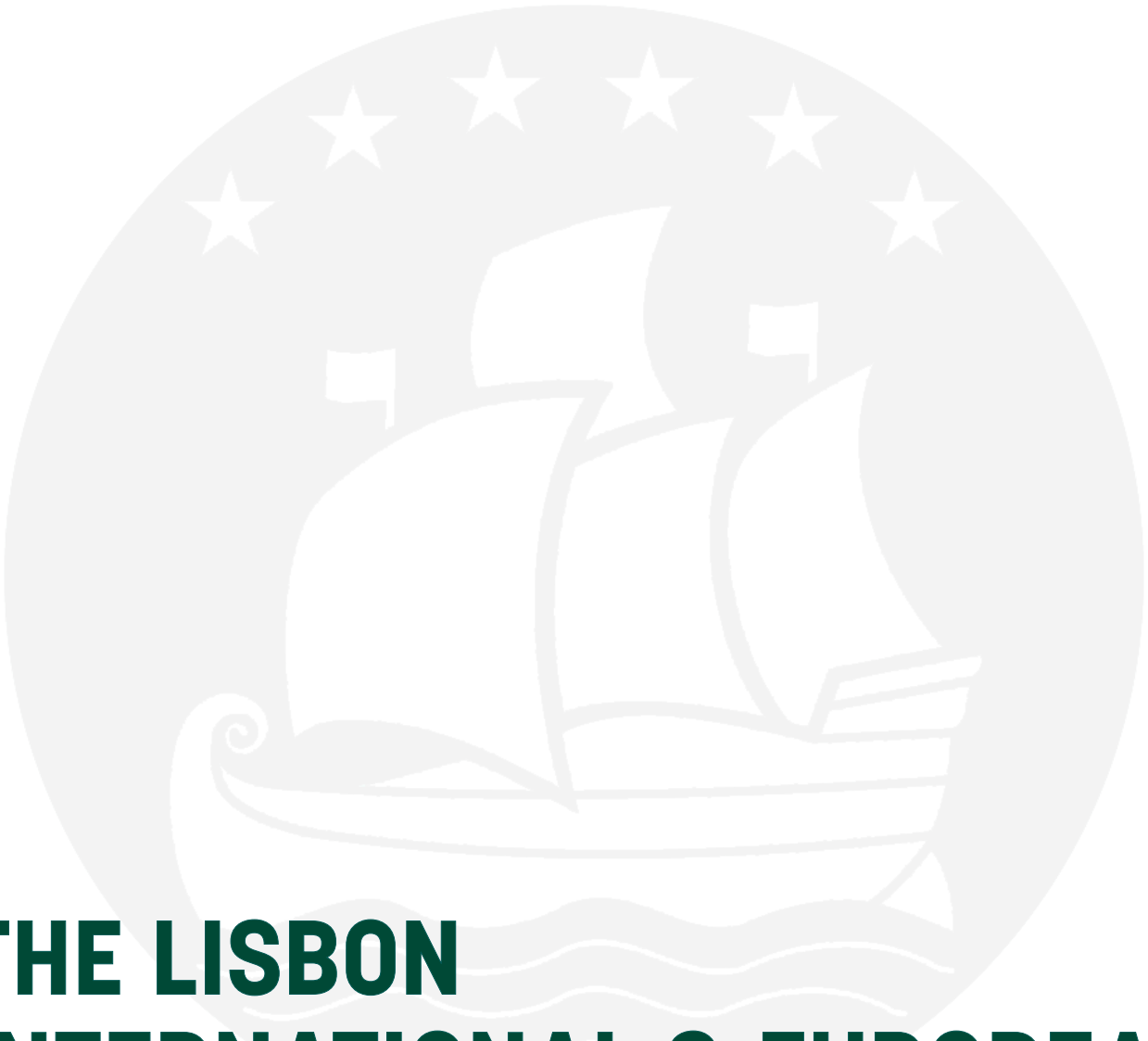




THE LISBON INTERNATIONAL & EUROPEAN TAX LAW SEMINARS

Nº 4 / 2022

THE IMPLICATIONS OF ADOPTING A EUROPEAN
CENTRAL BANK DIGITAL CURRENCY:
A TAX POLICY PERSPECTIVE

Luisa Scarcella



CIDEEFF

FCT Fundação
para a Ciência
e a Tecnologia



CIDEEFF

CIDEEFF

THE LISBON INTERNATIONAL E EUROPEAN TAX LAW SEMINARS

ISSN: 2795-4676

-

Nº4 / 2022

The implications of adopting a European Central Bank
Digital Currency: a tax policy perspectives

Author

Luisa Scarcella

Seminars Coordinators

ANA PAULA DOURADO | University of Lisbon

RITA DE LA FERIA | University of Leeds

Publisher

**CIDEEFF - Centre for Research in
European, Economic, Fiscal and Tax Law**

www.cideeff.pt | cideeff@fd.ulisboa.pt



FACULDADE DE DIREITO
UNIVERSIDADE DE LISBOA

Alameda da Universidade
1649-014 Lisboa

FCT Fundação
para a Ciência
e a Tecnologia

Esta publicação é financiada por fundos nacionais através da FCT – Fundação para a Ciência e a Tecnologia, I.P., no âmbito do projeto UIDB/04176/2020

-

Design & Production

OH! Multimedia

mail@oh-multimedia.com



The implications of adopting a European Central Bank Digital Currency: a tax policy perspective

LUISA SCARCELLA ¹

CIDEEFF | Universidade de Lisboa

¹ Postdoctoral researcher, Faculty of Law, University of Antwerp affiliated with the Research groups Business & Law and DigiTax.

Table of Contents

Abstract

(pag. 4) ►

1. Introduction

(pag. 5) ►

2. Central Bank Digital Currency: State of the Art

(pag. 7) ►

3. Why does a digital Euro with or without a legal tender status matter in the tax policy arena?

(pag. 13) ►

4. Promises and perils of adopting a digital euro from a tax policy perspective

(pag. 20) ►

5. Conclusions

(pag. 28) ►

Abstract

In the wake of the growing public interest in cryptocurrencies, the possible issuance by central banks of their own digital currency has been a topic of debate worldwide. However, little attention has been given to the relevancy of electronic and digital payments (including a possible digital euro) in the area of taxation, where policies limiting the use of cash are being intensively adopted all around the world. On one hand, tax policies fostering the use of electronic and digital payments as a Central Bank Digital Currency (CBDC) can help tax authorities to better monitor taxpayers' transactions in the fight against tax evasion and fraud. On the other hand, important concerns arise in the areas of data protection and the digital divide. These two kinds of concern should be taken into account and addressed by policymakers before the adoption of both a CBDC and tax policies favouring its use at the detriment of cash.

Keywords

CBDC - Digital Currencies - Cashless Payments - Electronic Payments - Tax Policy - Exchange of Information - Taxpayers' rights - Data Protection - GDPR - Digital Divide.



1. Introduction

Since the advent of so-called cryptocurrencies, there has been a growing interest in the possible introduction of a Central Bank Digital Currency (CBDC). During the last years, projects were launched by many central banks around the world¹. However, despite the numerous announcements of a forthcoming launch of a digital currency in the past years, research on how a CBDC shall be designed is still ongoing.² Even during the COVID-19 pandemic, proposals and further testing to adopt a CBDC have been flourishing around the world.³ As reported in newspapers, the Digital Currency Research Institute of the People's Bank of China, confirmed that trial programmes via China's state-owned banks in four cities – Shenzhen, Suzhou, Xiongan and Chengdu – have started.⁴ Moreover, in a counter-proposal to the Stimulus package in the US, there has been a reference to the possibility to introduce a digital dollar account maintained by a Federal reserve bank to deliver benefits in response to the pandemic crisis⁵.

1 Countries that started project concerning the possible adoption of a CBDC include Sweden, Switzerland, United Kingdom and the Eurozone. A list of other CBDC-related projects that are being carried out around the world up to February 2020, can also be found in Auer and Böhme, “The technology of retail central bank digital currency”, (2020) BIS Quarterly Review, p. 97.

2 For example, at the beginning of 2020, the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, the Sveriges Riksbank and the Swiss National Bank, together with the Bank for International Settlements (BIS), have created a group to share experiences as they assess the potential cases for CBDCs in their home jurisdictions. Bank for International Settlements (BIS), “Central bank group to assess potential cases for central bank digital currencies”, Press Release, Jan. 21, 2020, <https://www.bis.org/press/p200121.htm>.

3 The catalyst role played by the Covid-19 crisis has been recently highlighted by scholars. Cf. Arner, Buckley, Zetzsche and Didenko, “After Libra, Digital Yuan and COVID-19: Central Bank Digital Currencies and the New World of Money and Payment Systems”, (2020), EBI Working Paper Series n. 65.

4 K. Yeung, “China's digital currency takes shape as trials begin with travel subsidies and Communist Party fees”, South China Morning Post, April 19, 2020, <https://www.scmp.com/economy/china-economy/article/3080594/travel-subsidies-party-fees-chinas-digital-currency-takes>; Reporting on the trials and observing that a digital yuan adopted in large scale it is still far: Eliza Gkritsi, “China's biggest banks are testing the digital yuan ‘on a large scale’: report”, Technode, Aug 6, 2020, <https://technode.com/2020/08/06/china-biggest-banks-are-testing-the-digital-yuan-on-a-large-scale-report/>

5 H.R.6321- Financial Protections and Assistance for America's Consumers, States, Businesses, and Vulnerable Populations Act, 116th Congress (2019-2020), SEC. 101 “Direct stimulus payments for families” <https://www.congress.gov/bill/116th-congress/house-bill/6321/text?r=7&s=1>.

At the same time, different types of tax policies promoting the use of cashless payments have been adopted all around the world. Generally, the underlying justification for these policies is the possibility to reduce tax evasion and fraud by making transactions traceable.⁶ Against this backdrop, the issuance of a CBDC could foster the adoption of such policies offering a traceable digital legal tender to be used for payments. Nonetheless, privacy issues might arise. Moreover, it is fundamental to grant citizens robust connectivity infrastructures and to improve the general level of taxpayers' digital literacy.

In the first part of the contribution, the main focus will be on the possible benefits and risks posed by CBDCs by taking into consideration their different design and technical features. In this part, the possible attribution of the legal tender status to a European CBDC will also be addressed. The second part will analyse the relevancy of the possible adoption of a CBDC in the tax policy arena. Finally, the third part will highlight the promises and perils of tax policies requiring cashless payments which might involve the use of a CBDC. This part will cover concerns arising in the areas of data protection and of the digital divide.

⁶ For example, the value of promoting non-cash payments for fighting financial crime and tax evasion has been studied in particular by M. V. Achim, S. N. Borlea & V. L. Vaidean, "Does technology matter for combating economic and financial crime? a panel data study", in *Technological & Economic Development of Economy*, vol. 27, issue 1, 2021; G. Immordino & F. Flaviano Russo, Cashless payments and tax evasion, in *European Journal of Political Economy*, 2018, vol. 55, issue C, pp. 36-43.



2. Central Bank Digital Currency: State of the Art

From a definitory perspective, CBDCs can be defined as a form of central bank money - or better a liability - which is denominated in an existing unit of account (most probably the legal tender used in the respective jurisdiction) and which is used both as a medium of exchange and as a store of value. Among the many reasons advanced for the possible introduction of a CBDC, one of them is the decline in the use of cash⁷. Moreover, CBDCs could offer many advantages in terms of convenience, efficiency, stability and accessibility of retail payments.⁸ CBDCs can also represent a new policy instrument improving the overall effectiveness of monetary policy⁹. Furthermore, it has been claimed that a CBDC would be able to reduce the concentration of liquidity and credit risk in payment systems and to provide helicopter money more easily.¹⁰ At the same time, a CBDC could lower barriers to entry for new and smaller firms and foster competition in the payment sector while improving the levels of financial inclusion.¹¹ Since there are still parts of the population not having access to financial services and thus, without the

⁷ For instance, due to the increase in the use of electronic means of payment, the Swedish Riksbank is assessing whether a digital version of krona (e-krona) can represent a way to increase the resilience of payment systems by providing the general public continue access to central bank money. Sveriges Riksbank, “The Riksbank’s e-krona project – Report 1”, (2017). Reported also by BIS, “Central bank digital currencies”, (2018), p. 7.

⁸ All benefits that were put forward by literature have been summarized in a table contained in a recent working paper published by ECB. Bindseil, “Tiered CBDC and the financial system”, (2020) ECB Working Paper Series N. 2351, p. 5.

⁹ Barrdear and Kumhof, “The macroeconomics of central bank issued digital currencies”, (2016) Bank of England Working Paper n. 605, p. 3; Meaning et al., “Broadening narrow money: monetary policy with a central bank digital currency”, (2018) Staff Working Paper n. 724; Berentsen and Schar, “The Case for Central Bank Electronic Money and the Non-case for Central Bank Cryptocurrencies”, (2018) Federal Reserve Bank of St. Louis Review, p. 102; Mancini-Griffoli et al., “Casting Light on Central Bank Digital Currencies”, (2018) IMF Staff Discussion Notes, p. 25.

¹⁰ Dyson and Hodgson, “Digital Cash. Why Central Banks Should Start Issuing Electronic Money, Positive Money”, (2016) Working Paper.

¹¹ International Monetary Fund (IMF), “Deputy Managing Director Tao Zhang’s Keynote Address on Central Bank Digital Currency”, (2020) London School of Economics, February 28, 2020, <https://www.imf.org/en/News/Articles/2020/03/19/sp031920-deputy-managing-director-tao-zhangs-keynote-address-on-central-bank-digital-currency>. The possibility to enhance financial stability in this way has been highlighted also in <https://blogs.imf.org/2019/12/12/central-bank-digital-currencies-4-questions-and-answers/>

possibility to apply and receive social benefit measures, CBDCs could decrease costs and make payments systems easily available to these populations' segments.¹² Nonetheless, as it will be further argued in section 4.2, the use of a digital currency might represent a barrier for other segments of the population having digital literacy deficiencies or not benefiting from stable and good internet connections. Furthermore, the issuing of a digital currency by central banks could offer the possibility to track each transaction and can play an important role in areas such as anti-money laundering and the fight against tax evasion and terrorism financing. Finally, a persuasive justification for the adoption of a CBDC is the possibility to create a more direct link between citizens and central banks, allegedly increasing the general public understanding of the role of central banks¹³.

From a commercial bank perspective, their concerns arising from the adoption of a CBDC can relate to different elements. The possibility for citizens to move their money to CBDC accounts at a Central Bank could require commercial banks to rethink their business model and they might raise deposit rates or make wholesale funding more expensive, leading to a possible need for policy intervention on the interest bored by CBDC.¹⁴ Moreover, privacy concerns in relation to these accounts might arise and CBDCs might also lead to some additional costs for central banks since they will require them to build and maintain the underlying technology, monitor transactions and be responsible for AML/CFT compliance requirements while ensuring high cybersecurity standards and avoiding any technological glitch or human error that could undermine their reputation.¹⁵

However, and more importantly, what shall not be underestimate when adopting a CBDC are indeed the impacts- for bad and for good – on citizens.

2.1 The Design of a CBDC

As it emerged from the most recent report published by ECB in October 2020, a digital euro can be understood as central bank money offered in digital form for use by citizens and businesses for their retail payments. It would complement the current offering of cash and wholesale central bank deposits.¹⁶ Nonetheless, potential benefits and risks will be clearly shaped

¹² IMF, "Deputy Managing Director Tao Zhang's Keynote Address on Central Bank Digital Currency", op. cit. *supra* note 10.

¹³ Mersch, "Why Europe still needs cash", (2017) Contribution for Project Syndicate.

¹⁴ The structural bank disintermediation issue is summarized in detail by Bindseil, op. cit. *supra* note 7, pp. 8 *et seq.*

¹⁵ *Ibid.*

¹⁶ ECB, "Report on a digital euro", October 2020, p. 3.

by the way a CBDC will be designed.¹⁷ At the moment no universal definition of a CBDC can be found and this certainly depends on the fact that CBDC can be designed in multiple ways. As it emerges from the several working papers that has been published on this topic, CBDCs can have two main purposes, namely: a wholesale or a general purpose.¹⁸ In the case of the wholesale purpose, the adoption of a CBDC would not represent a true form of innovation in the area of payments and monetary policy as central banks already provide digital money in the form of reserves or settlement account balances held by private entities such as commercial banks at the central bank. Indeed, a CBDC would be truly innovative only when making accessible digital account-based forms of central bank money to the wide public. As underlined by *Mersch*, a real innovative twist in the area of monetary policy brought by digital currencies would be the possibility for the wide public to hold their own account directly in the Central Bank.¹⁹

Besides this first differentiation, there are other key features to be taken into account on how a CBDC shall be technically designed. Among many, the type of technology to be used, the level of anonymity and the role of the private sector.²⁰ Indeed, a CBDC could be implemented by using different types of technologies. Even though most of the privately created cryptocurrencies are based on blockchain and distributed ledger technologies, in the case of a CBDC, a centralized system might also be a viable option. Moreover, while cryptocurrencies like Bitcoin are based on public blockchains, where anyone could potentially be validating transactions occurring within the system, in a CBDC there is a strong interest in limiting the stakeholders who are enabled and trusted for validating transactions. Consequently, in the case of a CBDC, this would favour the adoption of a private or permissioned blockchain over the possibility to use a public blockchain. Additionally, the decision on which technology to use certainly impacts on the level of system-efficiency, cybersecurity, and on the degree of anonymity. This last aspect

¹⁷ In details on the design of a CBDC from an economic perspective, please refer to Agur, Ari, Dell’Ariccia, “How Could Central Bank Digital Currencies Be Designed?”, (2020) SUERF Policy Note n. 129.

¹⁸ On the general purpose CBDC, there has been differentiation from a CBDC which would consist of a digital token currency or a deposit account with the central bank. Bindseil, op. cit. *supra* note 7, p. 4. Agur, Ari and Dell’Ariccia, “Designing Central Bank Digital Currencies”, (2019) IMF Working Paper. Others have recently pointed out how this distinction might be problematic as some digital currencies seem to fit both definitions. Garratt, Lee, Malone and Martin, “Token- or Account-Based? A Digital Currency Can Be Both”, August 12, 2020, available at <https://libertystreeteconomics.newyorkfed.org/2020/08/token-or-account-based-a-digital-currency-can-be-both.html#.XzPfGffNVPY.twitter>

¹⁹ Reporting Mersch words “A wholesale CBDC, restricted to a limited group of financial counterparties, would be largely business as usual [...]. However, a retail CBDC, accessible to all, would be a game changer, so a retail CBDC is now our main focus.” Mersch, “An ECB digital currency – a flight of fancy? Speech by Yves Mersch, Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB, at the Consensus 2020 virtual conference”, 11 May 2020, available at <https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp200511~01209cb324.en.html>

²⁰ Other elements highlighted by BIS include whether CBDCs will be bearing the same interest rate of cash or whether a different rate will be set to either encourage or discourage the demand for CBDCs, the availability of CBDC (e.g. 24 hours a day for seven days a week or only at certain times) and whether quantitative limits or caps on the use or holdings of CBDC shall be applied. BIS, Report cited *supra* note 6, 1.

could be a potential element of debate as well. For instance, CBDCs could be provided partial anonymity (e.g. towards third parties but not the authorities)²¹ or anonymity could be lifted in particular cases determined by the law, such as under court order²². Indeed, anti-money laundering and fight against terrorism provisions might be requiring higher transparency in the way cash transactions take place and this necessity might be reflected in the CBDC debate as this technology might be even a better instrument to fulfil such need. However, a certain level of privacy shall still be recognised to citizens using a CBDC, especially since citizens might be having accounts directly at the central bank, giving the possibility to central banks to track and analyse all the transactions taking place.²³ Furthermore, to diminish the costs and risks for central banks, scholars and policymakers are suggesting the possibility to create a “synthetic” CBDC (a form of stablecoin fully backed by central bank reserves) which will involve private actors entering into a partnership with central banks.²⁴ In this cost-savvy solution for central banks, the private sector would be responsible for the maintenance of the underlying technology and in charge of running customer due diligence in the AML/CFT area.²⁵ Nonetheless, this option would be raising different cybersecurity and privacy concerns, therefore requiring a proper and prior determination of the roles to be played by the private sectors and central banks.

Thus, as it emerges, when designing a CBDC all pieces matter and have policy consequences. However, these consequences do not only arise in the areas of central banking and monetary policy, but also in other fields, such as tax law. An additional salient aspect which is relevant from a tax viewpoint as well and that necessarily shall be addressed before the introduction of a CBDC is the possible attribution of the legal tender status to CBDCs.

2.2 The Legal Tender Status of a CBDC

The attribution of the legal tender status is traditionally considered an act of public sovereignty, more specifically in the area of monetary and currency sovereignty. Consequently, the jurisdictional scope and definition of legal tenders will depend on what is defined as such in a specific country’s legislation. In the Euro-area reference to the Euro as the legal tender of the

21 Agur, Ari and Dell’Ariccia, op. cit. *supra* note 14.

22 Mancini-Griffoli et al., op. cit. *supra* note 8.

23 Concerns over privacy in digital payments have been clearly expressed by Häring, *Die Abschaffung des Bargelds und die Folgen*, (Bastei Lübbe Taschenbuch, 2018).

24 Suggestions for a synthetic stablecoin have been first put forward by Adrian and Mancini-Griffoli, “The Rise of Digital Money”, (2019) IMF Fintech Notes n. 19/001, p. 12 et seq. This solution has been also recommended in a study requested by the ECON Committee of the European Parliament. Kriwoluzky and Kim, “Public or Private? The Future of Money”, (2019) European Parliament Monetary Dialogue Papers. The solution has been recently welcomed also by scholars: Arner, Buckley, Zetzsche and Didenko, op. cit. *supra* note 3.

25 IMF, Deputy Managing Director Tao Zhang’s Keynote Address on Central Bank Digital Currency, op. cit. *supra* note 10.

Eurozone is contained in the Treaty on the Functioning of the European Union (TFEU)²⁶. At the same time, single jurisdictions at European level have their own reference to legal tenders also in other national legislation, *e.g.* in the civil code when regulating the ways in which an obligation can be extinguished²⁷. In relation to the Eurozone, the possible introduction of a CBDC has been considered both by the European Central Bank and by single national central banks.²⁸ However, before adopting a CBDC, it is fundamental to clarify whether it will have or not the legal tender status and how CBDCs will relate with other forms of legal tender.²⁹

The term legal tender is defined neither in Art. 128 (1) TFEU nor in Art. 16 (1) of the Statute of the ESCB and the ECB, which just recognize that the banknotes issued by the ECB and the national central banks are the only one to have the status of legal tender. From a legal perspective, the ways in which the legal-tender status could be attributed can be addressed by two different angles. On one hand, it can be argued that the recognition of the digital form of the euro as a legal tender will require the modification of the provisions regulating the legal tender status of euro banknotes and coins, namely Art. 128 (1) TFEU and Art. 11 of Council Regulation EC/974/98. On the other hand, a digital euro might be simply seen as a digital representation of euro banknotes and coins whose issuance requires solely the authorization from the Governing Council of the ECB which is responsible for formulating the monetary policy of the Union and for deciding “*the quantity of money in circulation, as an instrument of monetary policy control*”^{30, 31}.

In any case, if a CBDC is designed to be a substitute form of banknotes and coins accessible by a broad public, it might impact on different financial market stakeholders and players, and it might have implication in terms of liquidity. Moreover, as it will be further observed in the next section, the possibility to adopt a digital euro with the legal tender status can provide member states with a digital form of payment that can be included in their tax policies without incurring in possible criticisms over the possibility to interfere with monetary policies when adopting measures limiting the use of cash, which at the moment is the only legitimate form of legal tender.³²

26 Art. 128 (1) Treaty on the Functioning of the European Union.

27 *E.g.* in Italy, Civil Code Articles from 1277 to 1284; in France, within the Code Monétaire et Financier, Livre I.

28 For instance, Banque de France has launched a call for applications to experiment with a central bank digital currency for interbank settlements in April 2020. <https://www.banque-france.fr/en/financial-stability/market-infrastructure-and-payment-systems/call-applications-central-bank-digital-currency-experimentations>

29 Athanassiou, *Digital innovation in financial services: legal challenges and regulatory policy issues*, (Wolters Kluwer, 2018), p. 203. As one of the reasons why the legal tender status of a CBDC shall be clarified, the author also highlights how a CBDC’s public demand and utility as a monetary instrument might be impacted by the lack of the legal tender status and could make their issuance less appealing for central banks.

30 Art. 12 Statute of the European System of Central Banks and of the European Central Bank.

31 In the second case as well, the fact that single national central bank might be issuing a euro-denominated CBDC would not automatically qualify it as a legal tender, as the authorisation of the Governing Council of the ECB is necessary.

32 Such in the case pending before the European Court of Justice (ECJ). Request for a preliminary ruling ECJ, Joined Cases C-422/19 and C-423/19 Hessischer Rundfunk.

Consequently, because of the important implications that might derive from the introduction of such a technology, modification to both primary and secondary law, at least to clarify possible misunderstanding on the status of the CBDC, would be advisable and shall be adopted.³³

33 Modification in both primary and secondary law was also suggested by Athanassiou, *supra*, p. 205.



3. Why does a digital Euro with or without a legal tender status matter in the tax policy arena?

On July 15, 2020, in its action plan for fair and simple taxation supporting the recovery strategy after the Covid-19 crisis, the European Commission expressly invited tax authorities in expanding electronic payments methods at disposal of the taxpayers.³⁴ While the Covid-19 crisis has highlighted more than never before the potential of new technologies, the invitation of the EU Commission is in reality just a recognition of a trend that has been already followed by legislators and tax authorities all around the world. In this context, a digital euro simply adds a piece to an already existing puzzle.

Tax incentives, such as reduced VAT or turnover tax rates, aiming at encouraging the use of electronic and digital payments have already been adopted in different countries³⁵ (e.g. Argentina³⁶ and Korea³⁷). Simultaneously, in many countries, businesses are already obliged to use point-of-sale (POS) devices and accept card payments.³⁸ Furthermore, as cash is perceived as a facilitator of shadow economies, several countries have introduced quantitative limits on

³⁴ COM (2020) 312 final “An action plan for fair and simple taxation supporting the recovery strategy”, July 15, 2020,

³⁵ Gupta, Keen, Shah and Verdier (eds.), *Digital Revolutions in Public Finance*, (IMF, 2017), p. 7.

³⁶ As reported by the Organization for Economic Co-operation and Development (OECD). OECD, *Technology tools to tackle tax evasion and tax fraud*, (OECD, 2017), p. 22.

³⁷ A first tax Incentive for electronic payments was introduced in Korea in 1999 aimed at promoting payments made using credit and debit cards. This incentive allows wage and salary earners to claim tax deductions for eligible purchase which were made using traceable electronic payments instruments and it contributed to transforming Korea into a cashless economy. Sung, Awasthi and Lee, “Can Tax Incentives for Electronic Payments Reduce the Shadow Economy? Korea’s Attempt to Reduce Underreporting in Retail Businesses”, (2017) World Bank Policy Research Working Paper n. 7936, p. 2.

³⁸ E.g. Italy, but also Kazakhstan for individual businesses and in Turkey for some categories of self-employed (such as doctors, dentists and veterinarians). These last two examples were also reported by Sung, Awasthi and Lee, op. cit. *supra* note 35, p. 3.

the use of cash for purchases.³⁹ Moreover, countries have started to limit the use of cash for expenses eligible for business or personal deductions. For instance, in Colombia, from January 1, 2014, expenses for deductible tax purposes could only be made through payment methods such as deposits in bank accounts, bank transfers, checks and credit or debit cards.⁴⁰ Similarly, in Mexico, payments above 2,000 pesos can be deducted as company expenditures only if made through electronic transfer of funds by personal check or credit, debit, service cards.⁴¹ Ultimately, starting from January 1, 2020, in Italy certain expenses will be deductible from the personal income tax only if the payment were made through traceable means of payment, such as bank transfers, credit and debit cards.⁴²

The reasons why for tax purposes it can be beneficial to incentivise the use of electronic payments are of different nature.⁴³ Firstly, electronic payments can increase efficiencies in the areas of tax collection, processing and administration.⁴⁴ Indeed, electronic payments can help to cut bureaucratic inefficiencies, produce fiscal savings, and facilitate the delivery of benefits.⁴⁵ Secondly, electronic and digital payments allow tax administrations to keep track of transactions providing them with important data to tighten controls.⁴⁶ Under the light of a potential phasing out of

39 *E.g.* in Europe: in Italy, cash payments are only allowed up to an amount of €2,999.99. For higher amounts, it is necessary to use debit cards, credit cards, non-transferable cheques or bank transfers; In France, French residents for tax purposes can make cash purchases of up to the value of €1,000 while for non-residents, the limit is €15,000. As long as the amounts to be paid are under these limits, the trader must accept cash. For an overview of the EU Member States' policies limiting the use of cash please refer to the map and data provided by the European Consumer Centre France at this link <https://www.europe-consommateurs.eu/en/consumer-topics/financial-services-insurance/banking/means-of-payment/cash-payment-limitations/> ; Peru required that payment exceeding US \$1,000 must be made via bank account deposits, wire transfer, payment orders, credit cards, non-negotiable checks and other means of payment provided by entities belonging to the Peruvian financial system. Sung, Awasthi and Lee, *op. cit. supra* note 35.

40 Sung, Awasthi and Lee, *op. cit. supra* note 35, p. 3.

41 *Ibid.*

42 Art. 1, paras 679 e 680, L. n. 160/2019, Italian Budget Law 2020.

43 For the purpose of this contribution, electronic payments instruments are the ones included in the following three categories:

1. Electronic funds transfer-based instruments: consisting in direct credit transfers and direct debit transfers; 2. Payment card-based instruments, such as credit, charge, and debit card payments. These payment instruments typically still involve a plastic card and which payments are generally initiated, authorized, authenticated, cleared, and settled fully electronically; 3. Electronic money (e-money)-based instrument which involves the payer maintaining a prefunded transaction account with a payment service provider (PSP), often a nonbank. These instruments include online money in cases where payment instructions are initiated by internet, mobile money when using a mobile phone and prepaid cards. This categorization is the one reported by CPMI 2015, p. 13.

44 Denison, Hackbart and Yusuf, "Electronic Payments for State Taxes and Fees", 36 Public Performance & Management Review 4, (2013), 616-636, at 620. The authors also highlight the challenges which are faced when implementing electronic payments.

45 Highlighted in the context of developing countries by different authors contributing to Gupta, Keen, Shah and Verdier (eds.), *op. cit. supra* note 33.

46 Using a dataset that matches the information on VAT evasion with the ECB Payment Statistics, scholars have shown how the use of electronic payments such as debit and credit cards reduces VAT tax evasion. Immordino and Flaviano Russo, "Cashless payments and tax evasion", 55 European Journal of Political Economy C, (2018), pp. 36-43.

cash and the shift of all payment transaction from cash to electronic⁴⁷, digitalisation of payments could eventually transform consumer in third-party reporters for VAT or sales taxes by requiring them to only pay through electronic payment instrument.⁴⁸ The hoped-for outcome would be reducing the opportunities for tax evasion by shrinking the size of shadow economies.⁴⁹ Finally, it has been argued that digital payments can enhance transparency and accountability between governments and citizens by linking services provided by governments and levied taxes.⁵⁰

However, despite all the benefits that have just been listed, critical points on provisions limiting the use of cash have also been raised. These issues become newly relevant also in cases where such policies will require the use of a digital euro either for payments or for allowing expenses' tax deductions. For instance, such provision could have possible implications on the EU competence in monetary policies.

This issue has recently been at the core of a decision of the European Court of Justice (ECJ), the *Hessischer Rundfunk* case. This case concerned a German Land provision forcing taxpayers to pay television broadcasting fees only by means of electronic payments.⁵¹ In this case, the taxpayer offered to pay the fee in cash but this type of payment was refused since according to Art. 10 (2) of the Land Hessen licence fee statute, these fees can be paid only by way of cashless payment such as direct debit, individual transfer or standing order. Nonetheless, in the taxpayer's opinion, both national legislation and the third sentence of Art. 128 (1) TFEU would make provision for unconditional and unrestricted obligation to accept euro banknotes as a means for the settlement of monetary debts which could be restricted only by a contractual agreement or on the basis of authorisation under federal or EU legislation. Supporting the taxpayer's claim, the referring Court noticed how the European Union has exclusive competence in the area of monetary policy for all the Member States whose currency is the Euro and whose relevant provisions are contained in the treaties in Art. 127 *et seq.* Moreover, according to German Federal law banknotes denominated in euro are the sole unrestricted legal tender⁵² and both reasons of administrative efficiency and cost savings cannot automatically limit the payments modalities and would rather require authorisation through federal law.⁵³

47 Rogoff, *The Curse of Cash*, (Princeton University Press, 2016).

48 Jacobs, "Digitalization and Taxation", in Gupta, Keen, Shah and Verdier (eds.), *op. cit. supra* note 33, p. 32.

49 Rogoff, *op. cit. supra* note 43.

50 This type of benefits has been highlighted in a report prepared for the Australian Presidency of the G20 already in 2014. Klapper and Singer, *The Opportunities for Digitizing Payments: How Digitization of Payments, Transfers, and Remittances Contributes to the G20 Goals of Broad-Based Economic Growth, Financial Inclusion, and Women's Economic Empowerment*, (World Bank, 2014). Enhanced accountability has been specifically highlighted by Pillai, "Person to Government Payments: Lessons from Tanzania's Digitization Efforts. Case Study", (2016) Better Than Cash Alliance.

51 Request for a preliminary ruling ECJ, Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*.

52 Second sentence of Paragraph 14(1) of the BBankG.

53 Request for a preliminary ruling ECJ, Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*, para 10.

When looking at Art. 133 TFEU, it emerges that measures necessary for the use of the euro as the single currency shall be adopted at European level according to the ordinary legislative procedure, without prejudice to the powers of the European Central Bank and after consulting it. Limiting the use of banknotes, which according to Art. 128 (1) TFEU are the legal tender in the euro area⁵⁴, could be considered a measure affecting the use of the euro as the single currency.⁵⁵ Thus, it can be challenged whether this kind of tax provisions influence monetary policy which is of exclusive EU competence for Member States part of the Eurozone. Indeed, the specific content and scope of monetary policy and the EU exclusive competence in this area keep being an object of debate⁵⁶. However, as once again confirmed by the ECJ in the *Hessischer Rundfunk* case, even in absence of a precise definition of “*monetary policy*” in the TFEU, the Treaty, in the provisions relating to that policy, still defines both the objectives of monetary policy and the instruments available to the European System of Central Banks (ESCB) for implementing monetary policy itself.⁵⁷ Therefore, the concept of ‘monetary policy’ would not limited to its operational implementation⁵⁸, but also entails a regulatory dimension intended to guarantee the status of the euro as the single currency.⁵⁹ Under the light of these foregoing considerations, according to the Court, irrespective of any exercise by the European Union of its exclusive competence in the area of monetary policy for the Member States whose currency is the euro, EU law would preclude a Member State from adopting a provision which, in the light of its objective and its content, establishes legal rules governing the status of legal tender of euro banknotes.⁶⁰ Nonetheless, according to the Court, EU law would not preclude a Member State from adopting, in the exercise of a competence that is the Member State’s own, (such as the organisation of its public administration in the *Hessischer Rundfunk* case, but also the fight against tax evasion), a

54 On this point, see also ECJ: Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*, ECLI:EU:C:2021:63, para. 41: “Article 128 TFEU, by stating, in paragraph 1, that the ECB is to have the exclusive right to authorise the issue of euro banknotes within the European Union, that the ECB and the national central banks may issue such notes, and that the banknotes thus issued are to be the only such notes to have the status of legal tender within the European Union, that article lays down rules on the issue of euro banknotes in the European Union and, in conjunction with the third sentence of the first paragraph of Article 16 of the Protocol on the ESCB and the ECB, enshrines in primary law the status of those banknotes as legal tender.”

55 *Id.*, para 7.

56 Exemplificative is the tension between the ECJ and the German Constitutional Court as it emerges from their case law. ECJ: Case C-493/17, *Heinrich Weiss and Others*, ECLI:EU:C:2018:1000; Case C-62/14, *Gauweiler* ECLI:EU:C:2015:400; Germany: *Bundesverfassungsgericht* (Germany’s Federal Constitutional Court), 5 May 2020, Case 2 BvR 859/15.

57 See ECJ: Case C-493/17, *Heinrich Weiss and Others*, ECLI:EU:C:2018:1000, para. 50; Case C-370/12, *Pringle*, EU:C:2012:756, para. 53, and Case C-62/14, *Gauweiler and Others*, EU:C:2015:400, para. 42.

58 Under the first indent of Article 127(2) TFEU, this is one of the basic tasks of the ESCB.

59 ECJ: Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*, ECLI:EU:C:2021:63, para.38.

60 A conclusion that according to the Court shall be reached by reading the provisions contained in Article 2(1) TFEU, read in conjunction with Article 3(1)(c), Article 128(1) and Article 133 TFEU, and with the third sentence of the first paragraph of Article 16 of the Protocol on the ESCB and the ECB. ECJ: Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*, ECLI:EU:C:2021:63, para. 58.

provision which requires that administration to accept payment in cash for the pecuniary obligations imposed by the administration.⁶¹

Similarly, Concerning the possibility to limit payments in cash, the referring Court also cites recital n. 19 of the preamble of Regulation n. 974/98 stating that “*limitations on payments in notes and coins, established by Member States for public reasons, are not incompatible with the status of legal tender of euro banknotes and coins, provided that other lawful means for the settlement of monetary debts are available*”.⁶² Nonetheless, a more careful analysis of recital n. 19 also under the guidance of historical interpretation and considering the first part of the recital, highlights how limitations to payments in banknotes and coins shall be interpreted as referring to the transitional period from national currencies to the euro. In this case limitations on payments while granting other lawful means for settlement of monetary debts might have been needed to smooth the shift from an old legal tender to the new one, with the old local currencies losing their legal tender status six months after the end of this transitional phase, at the latest. Moreover, preambles to a community act are not legally binding.⁶³ Nonetheless, they may explain the content of a legislative measure, since the recitals in that preamble constitute important elements for the purposes of interpretation that may clarify the intentions of the author of that act.⁶⁴ Thus, according to the ECJ, in those circumstances, the second sentence of Article 10 and the second sentence of Article 11 of Regulation No 974/98, read in the light of recital 19 of that regulation, “*must be understood as meaning that, on the one hand, the status of legal tender of those notes and coins implies, in principle, an obligation to accept those notes and coins and, on the other hand, that obligation may, in principle, be restricted by the Member States for reasons of public interest*”.⁶⁵

This is indeed, the newest and most valuable contribution of the *Hessischer Rundfunk* to the ECJ case law in the area of monetary policy. As anticipated, this judgement is the first decision concerning whether the use of legal tender banknotes and coins can be restricted by public authorities. Nonetheless, and very importantly, the possibility to restrict the acceptance of the legal tenders, according to the Court is not unrestricted. As also noted by the Advocate General in her opinion, such restrictions must be proportionate to the public interest objective pursued.⁶⁶ In fact, the European Court stresses that by imposing such restrictions on the exercise of their sovereign powers, the Member States are limiting the possibility, recognised by EU law,

⁶¹ *Ibid.*

⁶² Request for a preliminary ruling ECJ, Joined Cases C-422/19 and C-423/19 *Hessischer Rundfunk*, para 19.

⁶³ ECJ: Case C-162/97, *Nilsson*, ECLI:EU:C:1998:554, para 54.

⁶⁴ ECJ: Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*, ECLI:EU:C:2021:63, para. 64.

⁶⁵ ECJ: Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*, ECLI:EU:C:2021:63, para. 67.

⁶⁶ AG Conclusions, Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*, ECLI:EU:C:2020:756, point 129.

of generally discharging a payment obligation in notes and coins denominated in euro.⁶⁷ Thus, those Member States must ensure that the measures they take comply with the principle of proportionality⁶⁸, which is one of the general principles of EU law.⁶⁹

Consequently, the Court admits on one hand that EU law does not preclude the adoption of national legislation excluding the possibility of discharging a statutorily imposed payment obligation in banknotes denominated in euro. Nonetheless, the Court sets some requirements for the Member States when adopting such measures, such as:

- (i) the legislation does not have the object or effect of establishing legal rules governing the status of legal tender of such banknotes;
- (ii) that legislation will not lead, in law or in fact, to abolition of those banknotes, in particular by calling into question the possibility, as a general rule, of discharging a payment obligation in cash;
- (iii) that legislation is adopted for reasons of public interest;
- (iv) the limitation on payments in cash which the legislation entails is appropriate for attaining the public interest objective pursued; and
- (v) it does not go beyond what is necessary in order to achieve that objective, in that other lawful means of discharging the payment obligation are available.

Indeed, this decision designs a proportionality framework for the adoption of tax provisions limiting the use of banknotes and coins, which does still entail some level of vagueness, which is intrinsic to any proportionality test. At the same time, the ECJ *Hessischer Rundfunk* decision also influences the future debate on the legal tender status of CBDC. The adoption of a digital euro having the legal tender status certainly provides Member States with a stronger ground of justification for adopting tax policies limiting or discouraging the use of cash because at that point the CBDC would be equal to banknotes and coins. In other words, a digital Euro with the legal tender status will circumnavigate some of the issues raised before the ECJ in relation to tax policies fostering the use of electronic payments. However, even though no legal tender status will be recognised to CBDC, as it emerges from the ECJ *Hessischer Rundfunk* case, Member Sta-

67 ECJ: Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*, ECLI:EU:C:2021:63, para. 69.

68 ECJ: Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*, ECLI:EU:C:2021:63, para. 70, stating that “the principle of proportionality requires, according to the settled case-law of the Court of Justice, that the measures concerned are appropriate for attaining the legitimate objectives pursued by the legislation at issue and that they do not go beyond what is necessary in order to achieve those objectives” As previously considered, among many, in ECJ: Case C-516/17, *Spiegel Online*, EU:C:2019:625, para. 34; Case C-145/10, *Painer*, EU:C:2011:798, paras.105 and 106.

69 ECJ: Joined Cases C-422/19 and C-423/19, *Hessischer Rundfunk*, ECLI:EU:C:2021:63, para. 60.

tes could indeed foster the use of the CBDC at the detriment of cash for public interest reasons, such as fighting tax evasion, as long as the legal measures establishing that is proportional to the public interest it aims at fulfilling.



4. Promises and perils of adopting a digital euro from a tax policy perspective

Even admitting that the Member States can legitimately introduce statutory policies limiting the use of cash for tax evasion purposes, there are still important issues that shall not be superficially dismissed. Fostering the use of electronic alternatives to traditional cash might seem incredibly appealing to reduce issues such as tax evasion because it would enable tax authorities to better monitor economic transactions. However, there are some other concerns which shall be addressed in current times, while the debate over the design, functioning and adoption of CBDCs, such as also a digital euro, is still ongoing.

The first area of concern is data protection. The increasing use of digital forms of cash, the electronic recording of those transactions and the exchange of the relevant information between different stakeholders at national and international level require taking into consideration which information and how those data will be exchanged in order to protect taxpayers' right to privacy⁷⁰. Moreover, while through CBDCs it could be possible to seize the opportunity and ensure a higher level of financial inclusion, there is still the need for major and serious improvements to bridge the so-called digital divide. On the wave of the digital divide gaps that have emerged during the Covid-19 pandemic, this seems the right moment to address how to guarantee proper access to good and stable internet connections and ensure that citizens have reached a sufficient level of digital literacy when interacting with public administrations, including tax authorities. The infrastructural systems allowing digital payments also becomes crucial and together with the level of taxpayers' digital literacy, it will not only determine the success of those policies but more fundamentally, it could lead to unequal treatment of taxpayers.

⁷⁰ Besides constitutional provisions protecting this right which can be found at constitutional level depending on the Member State, at European level this right is enshrined both in Art. 8 European Convention on Human Rights and Articles 7 and 8 of the Charter of Fundamental Rights of the European Union.

4.1 Data protection concerns

A digital euro can allow the monitoring of each transaction involving this type of payments. However, this also entails that in cases where a CBDC is issued by the central bank where taxpayers' accounts are directly held, that central banks will have a complete overview of all possible taxpayers' information and data. These data can certainly be relevant for tax authorities as well. As previously highlighted, there is a great interest by tax administrations to monitor transactions aiming at preventing tax evasion and fraud. Thus, the availability of the data collected by the central banks will enable them to better scrutinize possible evasion and fraud cases. At the same time, even in the case where commercial banks will be involved in the circulation of CBDCs and citizens will still be holding accounts there, those information will still need to be exchanged with the tax authorities based on the current exchange of information framework.⁷¹

However, the transfer or access to data held by the Central Banks or commercial banks and the subsequent transfer of those data to other tax authorities raise additional privacy concerns that shall be taken into account already when designing a CBDC. As it has emerged from a recent public consultation launched by ECB from October to January 2021, privacy has emerged as the key feature that a digital euro should offer, according to respondents to the public consultation.⁷²

At the moment, tax authorities have already access to information held by commercial financial institutions and they are already automatically exchanging this type of data. This is the result of the great effort of the last years to strengthen cooperation among tax authorities aiming at fighting tax evasion and fraud. Outcomes of this effort in the area of tax cooperation can be seen both at international and European level. At international level, the OECD Council approved in 2014 a Common Reporting Standard (CRS) aimed at calling jurisdictions to obtain information from financial institutions and automatically exchange that information with other states.⁷³ Similarly, Directive n. 2014/107/EU⁷⁴, closely based on the OECD CSR, has introduced an obligation for EU Member States to obtain information from financial institutions and exchange that information with the Member State of residence of the taxpayer on an annual basis. Moreover, Directive n. 2016/2258/EU⁷⁵ has provided for a legal basis enabling tax authorities to have access to anti-money-laundering information. It goes without saying,

⁷¹ Council Directive 2014/107/EU of 9 December 2014 amending Directive 2011/16/EU as regards mandatory automatic exchange of information in the field of taxation, O.J. 2014, L 359.

⁷² ECB, Eurosystem report on the public consultation on a digital euro, April 2021, p. 11.

⁷³ To provide a practical guide to implementing the CRS to both government officials and financial institutions, the OECD has also published a CRS Implementation Handbook. OECD, *Standard for Automatic Exchange of Financial Account Information in Tax Matters: Implementation Handbook*, (OECD, 2018).

⁷⁴ See note 58.

⁷⁵ Council Directive (EU) 2016/2258 of 6 December 2016 amending Directive 2011/16/EU as regards access to anti-money-laundering information by tax authorities, O.J. 2016, L 342.

that once data will be gathered by central banks in relation to transactions where a digital euro has been used and this data will be made available to tax authorities, the same data will also be transmitted to AML and foreign tax authorities. Indeed, the type of technologies on which a CBDC will be based can make an important difference in the level of data protection risk. For instance, the use of a distributed ledger or a centralized system will differently impact on how tax authorities will be given access and then will be able to forward those data. Furthermore, whether the CBDC will be issued directly by central banks or through the involvement of commercial banks and whether these CBDC will be made available to the broad public or just to a close targeted audience, will make difference in how personal and non-personal data will be stored and transferred among several or few different types of stakeholders.⁷⁶

Tax policies limiting the use of cash while fostering electronic payments and the use of a CBDC can contribute to the gathering of data deriving from these transactions. This information can be then used for different purposes, such as the maintenance of a risk assessment and management tool but also as a basis for improving future policies. Previous literature in the area of automatic exchange of information between tax authorities has highlighted already existing privacy issue⁷⁷ and this scholarly work can certainly offer a first guideline on how to address problems that new technologies might even exacerbate in the future.

The General Data Protection Regulation (GDPR)⁷⁸ also offers protection to taxpayers' privacy when his/her data are collecting and processed.⁷⁹ Since tax policies pursue a general public purpose object, the possibility to collect and process personal information in the area of taxa-

⁷⁶ A different technology and the different number and type of stakeholders which will be involved in the collection and transmission of data highly matters also in terms of cyber-security.

⁷⁷ Wöhrer, *Data protection and taxpayers' rights: challenges created by automatic exchange of information*, (IBFD, 2018); Huang, "Ensuring taxpayer rights in the era of automatic exchange of information: EU data protection rules and cases", 46 *Intertax* 3, (2018), pp. 225-239; Krähenbühl, "Personal Data Protection Rights within the Framework of International Automatic Exchange of Financial Account Information", 58 *European Taxation* 8, (2018), pp. 354-362. Concerns raised before the entry into force of the GDPR: Moreno González, "The automatic exchange of tax information and the protection of personal data in the European Union: reflections on the latest jurisprudential and normative advances", 25 *EC tax review* 3, (2016), pp. 146-161; P. Baker, "Privacy rights in an age of transparency: a European perspective", 82 *Tax notes international* 6, (2016), pp. 583-586.

⁷⁸ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), OJ 2016, L 119.

⁷⁹ On the relevance of GDPR provisions in the area of taxation, specifically referring to profiling and automated decision making see Scarcella, "Tax compliance and privacy rights in profiling and automated decision making", 8 *Internet Policy Review* 4, 2019; De Raedt, "The impact of the GDPR for tax authorities", *Revue du droit des technologies de l'information*, (2018), pp. 129-144; Ehrke-Rabel, "Big data in tax collection and enforcement", in Haslehner, Kofler, Pantazatou, & Rust (Eds.), *Tax and the Digital Economy: Challenges and Proposals for Reform*, (Kluwer Law International, 2019); Ehrke-Rabel, "Profiling im Steuervollzug", 101 *FinanzRundschau* 2, (2019), pp. 45-58. Regarding the relevant GDPR provisions concerning the use of big data by tax authorities, a sphere of application which could also become significant in relation to the data gathered by central banks and tax administrations through the implementation of a digital euro, refer to Mazzoni, "(Re)defining the Balance between Tax Transparency and Tax Privacy in Big Data Analytics", 72 *Bulletin for International Taxation* 11, (2018), pp. 656-663.

tion represents one of the fields of exception in the GDPR's application. In fact, Art. 23 (1) GDPR when setting out the areas in which Union or Member State law could restrict the GDPR's scope of application (Articles 12 to 22) through legislative measures, expressly mentions at letter e) the area of taxation. However, the legislative measures allowing a more permissive collection and processing of data in the area of taxation shall nonetheless contain *at least* specific provisions indicating information such as: the purposes of the processing, the categories of personal data, the scope pursued by such measure, the safeguards put in place to prevent abuse or unlawful access or transfer, the storage periods, the risks to the rights and freedoms of data subjects and the right of data subjects to be informed about the restriction of their data protection rights unless rendering vain the overall restricting measure.⁸⁰

Thus, also in the case of policies imposing the use of digital payments which might impact on taxpayers' privacy rights, there must be a precise legal basis and the legislative measure must report the indications listed in Art. 23 (2) GDPR. However, there is another major requirement imposed by Art. 23 GDPR to policies restricting data protection rights and obligations, namely: these restrictions must respect the essence of the fundamental rights and freedoms and must be necessary and proportionate measures in a democratic society. Consequently, the aim pursued by the restricting measures and their impact on taxpayers' privacy rights must be tested in the light of necessity and proportionality.⁸¹ The debate on how to strike the balance between taxpayers' privacy rights and the public interest in fighting tax evasion when tax administrations deploy new technologies is still *in fieri* and the possible adoption of a digital euro and how its design will affect tax policies shall also be included in this debate.

4.2 Digital Divide concerns

Undoubtedly, the possible advantages of the current e-government trend⁸² have clearly emerged during the Covid-19 pandemic, where suddenly every type of public service started to be

⁸⁰ The complete list of the information that needs to be contained in the legislative measure referred to Art. 23 (1) GDPR can be found at Art. 23 (2) GDPR.

⁸¹ Data protection authorities have already started to test the proportionality of tax measures involving the collection and processing of an incredible amount of data. For instance, the Italian Data Protection Authority has intervened more than once on tax policies impacting taxpayers' privacy rights. The most recent intervention has been an opinion in the area of electronic invoices where it has raised some issues with reference to the recent extension, by the legislator and the tax administration, of the scope for which non-relevant tax data collected through electronic invoices could be used for auditing purposes. See Garante per la Protezione dei Dati Personali, Parere sullo schema di provvedimento del Direttore dell'Agenzia delle entrate concernente Regole tecniche per l'emissione e la ricezione delle fatture elettroniche per le cessioni di beni e le prestazioni di servizi effettuate tra soggetti residenti e stabiliti nel territorio dello Stato e per le relative variazioni, n. 133, 9 luglio 2020. <https://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/9434785>.

⁸² E-government is generally understood as the use of information and communication technologies (ICTs) to deliver government services to citizens and businesses in a more efficient way. Among many, for an overview of the definition and activities included in the wording "e-government", please refer to Von Waldenberg, "Electronic government and development", *European Journal of Development Research* 16, (2004), pp. 417-432; Brown, "Electronic government and public administration", *71 International Review of Administrative Sciences* 2, (2005), pp. 241-254.

delivered in digital form. However, the pandemic has not only opened our eyes on the possibilities offered by new technologies, but it also showed the differences in terms of population access to and availability of new technologies depending on geographical, economic and cultural aspects. This gap, which finds its roots way before the outbreak of the Covid-19 pandemic, has been given a precise name by policymakers and scholars: “digital divide”. The “digital divide” concept has been generally defined as *“the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies (ICTs) and to their use of the internet for a wide variety of activities”*.⁸³

Under the aegis *“facis de necessitate virtutem”* many citizens that before the Covid-19 crisis had never used digital services provided by either private or public providers started to get acquainted and familiar with this type of technological solutions. Nevertheless, when more and more public services are offered only online, discrepancies in digital literacy and accessibility to digital solutions can widen inequalities among citizens even in developed countries.⁸⁴ Similarly, when tax policies require the cashless payment of taxes or when expenses are deductible only when electronic and digital means of payment were used, it follows that the digital divide affects the outcome and consequences of these policies as well. The same fate awaits tax policies limiting cash payments in favour of the digital legal tender form of the euro. Thus, digital divide concerns shall be addressed before adopting a CBDC and additional tax policies favouring it over cash.

Digital divide issues arise mainly in relation to the level of connectivity and digital literacy. With reference to the first area of concern, the impossibility to rely upon a good and sufficient connection makes compliance to some of these provisions impossible or more expensive solely based on the physical location of the taxpayers. Previous studies have shown how there is a substantial gap between urban and rural fixed broadband penetration rates which even though is slightly improving has remained the same in the last 9 years.⁸⁵ The lack of good connection

⁸³ OECD, *Understanding the Digital Divide*, (OECD, 2001), p. 5. However, a more complex and rich definition looking also at social stratification from a Weberian perspective has been developed almost 15 years afterwards by scholars. Blank and Groselj, “Examining Internet use through a Weberian lens”, *International Journal of Communication* 9, (2015), pp. 2763-2783.

⁸⁴ Highlighting how connected citizens in developed countries are also affected by the digital divide and are increasingly being excluded because of the increasing digitalization of public services: Ranchordás, “Connected but Still Excluded? Digital Exclusion beyond Internet Access”, in Ienca, Pollicino; Liguori; Stefanini, and Andorno (Eds.), *The Cambridge Handbook of Life Sciences, Informative Technology and Human Rights*, (Cambridge University Press, 2021, forthcoming); Id., “The digitalization of government and digital exclusion: setting the scene”, in Ferreira Mendes and Blanco de Moraes (eds.), *Direito Público e Internet: Democracia, Redes Sociais e Regulação do Ciberespaço*, (FGV Publicações/IDP/ Univ. Lisboa, Public Governance 4.0, 2020, forthcoming).

⁸⁵ European Commission, *Digital Economy and Society Index (DESI) 2020*, p. 27-28. According to this study, in 2019 only 68% of rural households in the EU had a fixed broadband subscription. The highest figures were registered in the Netherlands, the UK and Luxembourg while in Bulgaria and Finland less than half of rural households are subscribed. In terms of gaps between urban and rural penetration rates, these were almost identical in the Netherlands, the UK, Luxembourg, Germany, Denmark, Sweden and Belgium. Nevertheless, in many other Member States (e.g. Bulgaria, Finland, Latvia, Romania, Italy, Poland, Lithuania, Malta, Portugal, Greece, France and Spain), there are significant gaps of 12-30 percentage points between urban and rural take-up and fixed rural take-up is below 63%. These studies do not provide references to connectivity by businesses but only the level of integration in digital technology and only for large and SMEs businesses and in any case, no data is analysing rural and urban areas.

could consequently result in a different treatment among taxpayers based on conditions for which there is little the taxpayer can do.

The impossibility to proceed to cashless payments because lacking good telecommunication or broadband coverage creates issues also in cases where expenses are deductible only if the payment was made in electronic or digital form. In such cases, if there is no possibility to proceed with the electronic or digital payment and the taxpayer will need to pay in cash, he or she will lose his or her right to deduct those expenses. Indeed, the possibility to deduct certain expenses is one of the cornerstones of the progressivity of the income tax system. Not allowing taxpayers to deduct expenses that were paid with other forms of legal tenders will lead to the unequal treatment of taxpayers based on the type of payment they have used, and which might not only depend on their personal preference. Thus, the taxable base will be based not on the actual ability to pay of the taxpayer but whether a certain means of payment was used. This will not only lead to the breach of the ability principle, one of the fundamental principles of taxation, but also more generally to the violation of core constitutional values, such as the principle of equality.⁸⁶ Scholars have already highlighted how the constitutional dimension of deductions and exemptions adopted to spare from taxation the income of the taxpayer allowing a minimum subsistence is not only a derivation of the ability to pay principle but it is a concrete expression of the notion of human dignity, since taxation shall not lead to increased poverty under minimum survival standards.⁸⁷ Since human dignity constitutes a core value of EU primary law⁸⁸ and it is the first fundamental right protected by the Charter⁸⁹, it derives that such a breach of the ability to pay principle would be constituting a violation of the EU Charter of fundamental rights and other provisions of EU primary law. Moreover, in some States, expenses in the area of healthcare, education, sport activities and others can also be linked to other constitutional protected values. Hence, this type of provisions does not only lead to possible unequal treatment but might also prevent taxpayers to fully enjoy his/her constitutional and fundamental rights.

However, investments in infrastructure might not be enough. The lack of digital literacy skills or the impossibility to afford a digitally-enabled device and/or an Internet Service Provider

⁸⁶ Burgeois, “Constitutional framework of the different types of income”, in Peeters (ed.), *The Concept of Tax*, (IBFD, 2005), p. 83 et seq.

⁸⁷ Englisch, “Ability to Pay in European Tax Law”, in Brokelind (ed.), *Principles of Law: Function, Status and Impact in EU Tax Law*, (IBFD, 2014), pp. 439-464.

⁸⁸ Art. 2 Treaty of the European Union.

⁸⁹ Art. 1 Charter of the Fundamental Rights of the European Union. Human dignity is also addressed in the Preamble of the Charter.

(ISP) contract, strengthen the association between financial exclusion and social exclusion⁹⁰ and as previous studies have shown, it confutes the assumption that in the overall Global North digital non-participation is simply a matter of personal choice.

When looking at the Digital Economy and Society Index (DESI) whose data for 2019 were released in the middle of the pandemic, it emerges that there are still too many EU citizens that have never used the internet and many of them belong to vulnerable categories. It can be easily assumed that the percentage of internet usage as well as online services, whether provided by private or public stakeholders, might have increased due to the pandemic. Nonetheless, what emerges from the last DESI data is still very significant in order to take consciousness of what still needs to be done and before taking further steps favouring electronic and digital payments over cash. Especially in relation to granting expenses deduction only in cases where electronic and digital payment systems were used, financial and digital literacy of the taxpayers must be taken into consideration. As it concerns digital literacy, the DESI data shows how within the European Union there are still strong discrepancies among countries in the number of internet active users.⁹¹ In some Member States, over one-quarter of the population still does not regularly go online (*e.g.* 33% of Bulgarians and 28% of Romanians)⁹². Despite the 2019 slight decrease in the share of people who have never gone online and that we can expect a similar trend in 2020, in 2019 the current share of 9.5% unconnected people in the EU warrants further action.⁹³ Moreover, data shows that most active internet users are young individuals (97% of those aged between 16 and 24 are regular internet users), those with a high level of formal education (97%) and students (98%)⁹⁴ whereas there is still a high number of non-users among people with no or low education levels (24%), those aged between 55 and 74 (23%), and retired and inactive people (26%). From these data, it clearly emerges that some of the most vulnerable members of our society based on their age or their level of education might not be sufficiently digital literate and might not be able to comply with provisions imposing the use of digital means of payment. Moreover, within the active users in the whole European Union, only 66% have been using online banking services.⁹⁵

90 Chen and Wellman, "Minding the cyber-gap: the Internet and social inequality", in Romero and Margolis (Eds.), *The Blackwell Companion to Social Inequalities*, (Blackwell, 2005), pp. 523-545; Warren, "The digital vicious cycle: links between social disadvantage and digital exclusion in rural areas", 31 *Telecommunication Policy* 6-7, (2007), pp. 374-388; Fuentes-Bautista and Inagaki, "Bridging the broadband gap or recasting digital inequalities? the social shaping of public Wi-Fi", in Straubhaar, Spence, Tufekci and Lentz (Eds.), *Inequity in the Technopolis: Race, Class, Gender, and the Digital Divide in Austin*, (University of Texas Press, 2012), pp. 193-222; Lorna, Cottrilla, Farringtona, Williams, Ashmorea, "The digital divide: Patterns, policy and scenarios for connecting the 'final few' in rural communities across Great Britain", 54 *Journal of Rural Studies*, (2017) pp. 386-398.

91 European Commission, Digital Economy and Society Index (DESI) 2020, p. 59.

92 *Id.*, p. 58.

93 *Id.*, p. 59.

94 *Id.*, p. 58.

95 However, it might be taken into account that the Covid-19 pandemic could have influenced an increase in the use of those services during the period of lockdown.

These data clearly show the digital illiteracy of some taxpayers, which in the cases of tax policies forcing taxpayers to use a CBDC, could for instance determine their inability to digitally pay for their deductible expenses. Consequently, they will be paying more taxes than what would be due independently from the payment system that was used. From this perspective, both the infrastructural and illiteracy elements undermine the ability to pay principle, which finds protection at direct and indirect constitutional level in most of the EU Member States and which has been argued to be a principle of the EU itself.⁹⁶ For these reasons, provisions aimed at replacing cash with digital means of payment cannot be adopted if not accompanied with large investment in broadband connection infrastructures. At the same time, bigger efforts shall be made to reduce the level of digital illiteracy or by granting the digital illiterate parts of the population exceptional provisions, such as allowing expenses' deduction independently by the means of payment used to elderly people above a certain age. Alternatively, free guidance could be provided to the vulnerable groups through public intermediaries.⁹⁷

96 Englisch, op. cit. *Supra* note 67, pp. 439-464; Kühbacher, "Das Leistungsfähigkeitsprinzip auf nationaler und gemeinschaftsrechtlicher Ebene", in 27 Österreichisches Recht der Wirtschaft 3a, (2009), pp. 150-155. Examples of a constitution which expressly contain the ability to pay principle are: Italy (Art. 53 (1) of the Italian Constitution); Croatia (Art. 51 of the Croatian Constitution); Cyprus (Art. 24 (1) of the Cypriot Constitution); Greece (Art. 4 (5) of the Greek Constitution); Spain (Art. 31 of the Spanish Constitution). In some countries, despite the express mention, it is understood as incorporated in the Constitution: Bulgaria (Art. 60 (1) of the Bulgarian Constitution) and Hungary (Art. 30 of the Hungarian Constitution) and Portugal (Art. 107 of the Portuguese Constitution). Differently, in some other countries like Germany, Austria and Poland the ability to pay principle has been derived by other constitutional guarantees (e.g. equality and solidarity) and has been considered as having the status of a constitutionally enforceable right as resulting from Constitutional Courts' case law. Finally, in countries such as Romania, Finland, Sweden, Luxembourg and Denmark, even though the ability to pay principle is not a principle with constitutional rank it is still considered an important guiding principle for tax law design. (As reported by Englisch, op. cit. *supra* note 67, pp. 439-464).

97 The need for alternatives for digital illiterates and for the ones who do not have access to the internet has been also already addressed in other areas by Constitutional Courts. For instance, the Belgian Constitutional Court in 2004 decided that a law prescribing that the Belgian Official Journal (*Moniteur belge*) could be consulted only online was in breach of the Belgian constitution because at the detriment of the persons not having access to the internet. The Court did not even considered a sufficient alternative the possibility to obtain a physical copy of an act or document contained in the Belgian Official Journal, as the people who did not own a computer could have not been able to detect the text they were looking for. (See Belgian Const. Court, nr. 106/2004, 16 June 2004, B.16-B.23) Similarly, the possibility of obtaining a copy by means of a free telephone hotline at cost price was also considered inadequate by the Council of State for the very same reason (See Adv. RvSt. no. 38451/1/2/3/4/VR 31 May 2005). A solution has been reached with the adoption of articles 4 to 8 in the Law 20 July 2005 and the Royal Decree 27 September 2005 which prescribes that the chief clerk of each court of the judicial system shall ensure that a printed version of the summary(s) of the *Moniteur belge* is made available to citizens on a daily basis and that the printed summaries are kept at the registry so that they can be consulted at a later date. Moreover, the registry containing the printed summaries of the *Moniteur belge* shall display a notice is displayed, mentioning the following information: the address and the freephone number of the Directorate of the *Moniteur belge*, specifying that it is a freephone number; the fact that it is possible to obtain a copy of all acts and documents published in the Belgian Official Journal at cost price by contacting the Belgian Official Journal Directorate; the fact that the Directorate of the Belgian Official Journal offers a free research service for acts and documents published in the Belgian Official Journal.



5. Conclusions

Through technological advancement such as a CBDC, tax authorities might be enabled to strengthen their measures to fight tax evasion and fraud. Nevertheless, the efficiency of enforcement systems- reinvigorated by the data provided thanks to the complete traceability of economic transactions- cannot be put on a pedestal at the detriment of fundamental rights, such as privacy and equality. Thus, the promises of new technologies such as a CBDC and its implementation through tax policies need to be carefully and proportionally calibrated with the data protection and equality issues at stake. The debate over the design of a CBDC has not been on an empty stomach regarding possible privacy concerns. However, it lacks a broader perspective on how the data collected might be relevant for other public authorities, such as tax administrations. So far, not enough attention has been given to the fact that the data gathered through the use of a CBDC will not only be transmitted to other domestic public administrations, but those data will also be exchanged with foreign authorities. In fact, existing provisions already allow this and due to our globalised economy, cooperation in tax matters to fight tax evasion and fraud is needed more than ever.

Furthermore, this contribution also aims at highlighting the unequal treatment of taxpayers that can derive from introducing tax policies requiring cashless payments, such as the use of a CBDC. Poor connectivity infrastructures and the insufficient level of digital literacy of some of the most disadvantaged groups of our communities (*e.g.* the elderly and not educated) will not enable them to comply with provisions that might even allow tax deductions solely based on the use of a digital payment system. Thus, the amount of due taxes will not be based on the ability to pay principle anymore, but it will be influenced by taxpayers' digital skills and taxpayers' location.

The aim of this paper is not to take a stand in recognising privacy and digital literacy concerns as insurmountable obstacles. On the contrary, it hopes to create awareness to other important key aspects to be considered in the design of a CBDC. Data protection concerns and the possible use of this data by tax administrations and other public authorities, need to be already taken into account while the debate on the design of a digital euro is still ongoing. For instance, a

privacy by design approach considering these needs when designing a CBDC might lead to fewer issues that might be harder to solve *ex post*. Finally, in terms of digital divide, it could be beneficial to adopt more proportionate policies favouring digital payments by providing for certain exceptions and different payment requirements in favour of the most vulnerable groups of our communities who do not have access to digital devices and not sufficient digital literacy skills. Indeed, this is only an interim solution which cannot substitute the fundamental need for major governmental investments in public (digital and non-digital) infrastructure and digital literacy. Nonetheless, it is essential for the time being to keep in consideration the different needs and situation within our societies in order to ensure the respect of everyone's fundamental rights.