HOUSE OF LORDS

Economic Affairs Committee

Corrected oral evidence: Central Bank Digital Currencies

Tuesday 12 October 2021

4 pm

Watch the meeting:

Members present: Lord Forsyth of Drumlean (The Chair); Lord Bridges of Headley; Viscount Chandos; Lord Fox; Lord King of Lothbury; Baroness Kingsmill; Baroness Kramer; Lord Livingston of Parkhead; Lord Skidelsky; Lord Stern of Brentford.

Evidence Session No. 2 Virtual proceeding Questions 11 - 19

Witnesses

I: Natasha de Teran, Member of the Financial Services Consumer Panel; Georges Elhedery, Group Executive and Co-CEO of Global Banking & Markets, HSBC.

USE OF THE TRANSCRIPT

1. This is an uncorrected transcript of evidence taken in public and webcast on www.parliamentlive.tv.
2. Any public use of, or reference to, the contents should make clear that neither Members nor witnesses have had the opportunity to correct the record. If in doubt as to the propriety of using the transcript, please contact the Clerk of the Committee.
3. Members and witnesses are asked to send corrections to the Clerk of the Committee within 14 days of receipt.

Examination of witnesses

Natasha de Teran and Georges Elhedery.

Q11 **The Chair:** Natasha de Teran is a member of the Financial Services Consumer Panel, and Georges Elhedery is the group executive and co-CEO of Global Banking and Markets, HSBC. Welcome to this committee and inquiry. We appreciate you giving up your time. I apologise for the fact that we are running a few minutes late.

May I ask the first question? What are the main issues driving central banks to explore central bank digital currencies? Why do central banks consider CBDCs, rather than alternative solutions, to be the correct answer to issues such as the decline in cash and the need to improve payment services?

Georges Elhedery: I sponsor the CBDC initiative as the group executive for HSBC and therefore have diverse engagements with various central banks. I am also a member of the Bank of England's engagement forum on CBDCs. That is part of my day job, on top of my executive responsibilities in global banking and markets.

The interesting point is that different central banks that we have been engaging with have had different reasons for looking at CBDCs as an alternative to bank notes. I will probably articulate a couple of them and am happy to go into any details afterwards as you deem fit.

For some central banks—eCNY was mentioned earlier—the main reason for what observe is that retail payments in mainland China has practically moved away from the banking sector and become dominated by two very large technology companies that are dealing with most of these payments. It became practically impossible in the competitive landscape for any single bank to try to regain market share and capabilities in that space.

Therefore, it became paramount that the only way to achieve it was by teaming up with six banks on a central bank initiative to come up with an alternative mechanism that tries genuinely to compete and take a share in retail payments and bring greater credibility and capabilities for the regulated banking system to intervene in the payments space, but to bring with it private sector innovation, because as it was concentrated with two big techs it was difficult to envisage innovation from SMEs, et cetera.

If you move closer to home, as was said earlier, the European Central Bank has been considering a number of initiatives on CBDCs. The view at this stage is that bank note utilisation has dropped so much in the eurozone that the proximity of the consumer of retail—the citizen or resident—with its central bank has reduced in an uncomfortable way, and there is a need to ensure that there will always be an alternative mechanism to bank notes for residents of the eurozone to feel they have direct access to their central bank. Technology was not the main source.

CBDC was not a technology exercise; it was mostly an exercise in regaining direct contact with the consumer in the eurozone.

The US is important. There is ongoing debate in the US on whether this is relevant. We looked at stablecoin development, which we talked about earlier. Stablecoins have that name only because the issuers choose to call them that. There is no prudential or any other regulation that guarantees to the consumer that they indeed will be stable and they will get their money back at the end, or whenever they need it.

When you consider that some stablecoin providers are now offering interest rates, or claiming to be willing to do so, up to 4% when bank account interest rates are at zero, you have a real displacement risk from the regulated, supervised deposit base in banks moving to the as yet unregulated and unsupervised stablecoin area. It is important to try to avoid that initial fringe activity, which will become more systemic if we see more deposits being lost by the main banks and going into unregulated DeFi or decentralised finance.

That would be an argument to start to say that we need to displace these unregulated activities with more consumer-related protection capabilities and to try to bring the banks back into that space and regain that share.

The Chair: Looking at the other side of that coin, will you briefly explain what scale of disintermediation might result from the introduction of a UK CBDC, and what the consequences could be?

Georges Elhedery: The first argument I would make is that it is clear from the communication we are having with the Bank of England that we do not look at CBDC as a solution looking for a problem. We need to understand the problem and define the solution for it rather than just bring it in and find what problem we are trying to solve. We are looking at it from the point of view of whether there is a need and whether we have something that fulfils that need.

The risk of disintermediation in the UK at this stage may still be benign, but we do not have accurate data to reflect how many deposits by actual UK residents have moved away from the regulated to the unregulated DeFi space. Pound sterling stablecoins are relatively small, but, as was mentioned earlier, UK residents could move money into dollar stablecoins, so it will not necessarily be seen in the GBP space.

That risk can go only one way from here. We see a strong appeal for DeFi; there is a strong appeal for the anonymity, flexibility and technological advances that they give, but to all intents and purposes the risks of being unregulated and the systemic and other consumer risks that they pose are not necessarily well understood by retail. Therefore, this is not acting as a barrier for a growing number of residents possibly starting to move their money there, especially if they can get interest or they have access to other services that they may not get from their traditional bank.

The Chair: Natasha, do you want to comment on that last point about disintermediation and the influence of big tech?

Natasha de Teran: I agree with everything Mr Elhedery said, but when we think about disintermediation I do not think we need to look at the status quo and consider what a CBDC would do versus today, because tomorrow will look very different. Instead we have to think about tomorrow, and whether a CBDC would actually level the playing field there, allowing banks to compete alongside others in the DeFi and stablecoin space. It is not in yesterday's or today's world that we should be considering a CBDC either in this respect or in any other.

When it comes to disintermediation on other aspects, it really comes down to the design of the CBDC—whether there are limits on how much we can hold in balances, whether there are transaction limits, whether there is remuneration, tiered remuneration and so forth. I do not think that there are easy answers to it, but they can be designed so that they do not disintermediate banks too much.

All of us have to be worried if there are impacts on the supply of credit. That is where the design needs to be most sensitive, because if banks are no longer able to provide us with credit at the price that they do today we will need to have some other form of supply.

Q12 **Lord Fox:** We have talked a lot about banks and institutions. May we talk now about consumers, merchants and people who will be using this currency? Natasha, you said that central banks will have to make the case that CBDCs are more useful and easier to use. I assume that means that they are more useful and easier to use than so-called stablecoins or cash. If you were a central bank, how would you make the case that these are easier to use and more useful to people?

Natasha de Teran: For businesses, cash is not easy to use.

Lord Fox: Agreed.

Natasha de Teran: It is risky, cumbersome and expensive, so anything should be better than that.

Lord Fox: But they already have electronic money. My sister runs a news agency. Seventy per cent of her sales are done on a card. She no longer has to carry bags of cash to a bank, so that is happening in the current world.

Natasha de Teran: That is happening in the current world. I believe that card settlements are not immediate. Her payments will not be reaching her immediately, which has a drag on her business, and there are also costs involved. Those are not insignificant, are perhaps something a CBDC could improve on.

From a consumer standpoint, one would be looking at safety, because as consumers we do not see the cost of a card payment; it is not transparent to us. So in a world where different payment methods do not compete on cash, as they do not in the UK, it is difficult to translate that into an appealing cost equation for a consumer, but if I perceive a new payment method to be safer and accepted more ubiquitously accepted I might find it appealing.

Lord Fox: Mr Elhedery, as a bank that is currently levying some of these costs in cashing up cash or using a card, do you agree? What benefits would you see in this for consumers particularly rather than merchants?

Georges Elhedery: First, I agree with Ms de Teran that the various considerations that she raised all play into the consumer’s expectation or acceptance of CBDCs.

There are a few other considerations. When you mention cards, it assumes that the consumer has a bank account and that the merchant has a point-of-sale mechanism or capability. Possibly, that transaction is done physically at the point of sale. For instance, CBDCs would allow for no-cash accounts being available or transactions in out-of-hours banking services, or possibly even transactions offline, so they do provide a level of flexibility that is not available today. They provide more flexibility for online payments and purchases as well. If we put all of those in the mix, we can see some of the benefits.

Lord Fox: If the new payment architecture initiative was successful, would CBDCs be a step change for consumers, or merely a shake-up? A previous witness referred to banks needing a shake-up. They could use the current architecture to do that, or they could use new architecture. How much of this is procedural conservatism, and how much is an actual roadblock to their actually doing it?

Georges Elhedery: That is a fair question. One could argue that some of the benefits immediately available to a consumer were marginal. The main consideration that we are looking at as a financial institution is what additional innovation one can do on these new payment platforms that can leapfrog the payment services. If we have to think of them today, maybe I do not have the answer.

A lot has been done by the Bank of England and UK institutions, public and private, to improve RTGS and the domestic payments systems. A lot has been done, but it is built on an incremental innovation on an existing platform.

Therefore, the question that we are asking ourselves is: does CBDC provide a leapfrog platform that allows more innovation by various fintech or other technology players and all sorts of services that would not be possible on today's platform?

Lord Fox: Ms de Teran, is that your view as well?

Natasha de Teran: Yes. I understand that the way central banks are considering a CBDC—I believe that the UK is still considering whether to proceed with a CBDC rather than it being a fait accompli—is to try to think about future needs rather than what we need today. We did not know in 2007 that we needed a smartphone to make payments; we did not even know that we needed a smartphone, but it turns out now that we are all using our smartphones to make payments and many new things have become possible.

In this tremendous exercise that is going on the world over—it is a fantastic thing to be doing—we have the luxury of saying, "What should the payment system look like? Do we need a new framework to support it? How can we build in maximum flexibility to allow for competition, innovation, new entrants and new business opportunities?"

Lord Fox: I think that advising us to look at the counterfactual is quite an important piece of advice.

Q13 **Viscount Chandos:** I think that the evidence that we have already heard suggests that the central banks are considering CBDCs in response to innovation in cryptocurrency and fintech. What risk would there be that if a CBDC were introduced it would stifle innovation in finance and payments, and what factors should policymakers bear in mind to avoid stifling that innovation?

Natasha de Teran: There is a risk that it might stifle some negative innovation; it might help to distinguish a sovereign unit of account from other ones. I am not saying that all other ones are bad by definition, but we know that there are some less salubrious pretenders out there. I think that having an a digital manifestation of the sovereign unit of account could be very useful to that extent.

The design of the infrastructure will dictate how much competition there can be, but my understanding, certainly from everything that the Bank of England has put out either directly or through the Bank for International Settlements, is that they seem desirous of encouraging competition, including in the stablecoin area.

The danger is that without some kind of new framework—whether that has to be CBDC per se or just a new framework for the digital age—we will see great concentration, much as we have seen in China, and in the card industry here already.

Georges Elhedery: Echoing that, the first assumption that we are making is that CBDCs will be a public-private partnership initiative—steered by the Bank of England in the UK, but with a lot of private sector involvement in the technology design and operating aspects—providing a sufficiently open architecture for new entrants and new technology to be built upon it, but at the same time being sufficiently safe for mass usage across the United Kingdom, as opposed to being restricted to a small section of residents who are very crypto-savvy.

Secondly, we look at CBDCs as a means of payment. I genuinely do not think that CBDCs should be considered as a store of value. If CBDCs were to become a store of value, it would probably defeat the deposit base of banks and their capability to lend, and not necessarily do much apart from taking out the credit risk of banks for all the depositors.

The additional store of value is therefore limited, but if we look at it as a means of payment the additional benefits are materially more visible: speed, cost efficiency, operating hours and all sorts of services that can be built upon it. This is where innovation can take place. If that is the target, it will facilitate innovation.

Thirdly, compliance has been a major area of investment in financial institutions to ensure that any money transaction meets all sorts of customer due diligence. I refer to the KYC criteria but also to all sorts of money laundering, terrorism financing, tax avoidance and other illicit activity criteria, for which the compliance controls cost a lot of money to maintain but are built on clunky, old technology that has been built over the years.

That will allow for a lot of innovation in the regtech, or regulatory technology, space where we can leapfrog in having all these compliance criteria met in a materially more efficient, faster and safer framework. Therefore, not only are we providing more services through fintech; we are probably also allowing more regtech to operate on modern technology to support the whole banking system and payment channels and services.

Viscount Chandos: How do you prevent CBDCs from being a store of value not necessarily in a steady state but at a time of financial crisis?

Georges Elhedery: This is one of the main considerations in our discussions with the various central banks, including the Bank of England. A bank run today can happen online in seconds and create a major systemic risk for banks. There is not even the time to stand in a queue to try to withdraw money; it can happen instantaneously and put severe stress on the banking system.

This is where we need to provide guardrails. The initial observation is that with the right guardrails you can prevent this. There are various ways in which we solve this. Some central banks, not in the UK but elsewhere, have solved this by limiting the amount one can hold in a CBDC account; it is meant to be for petty retail payments as opposed to large financial transactions. If you limit the size for some of the money laundering or other illicit activities and equally limit the amount of systemic stress you put on a given bank under a bank run, that is one solution. We need to work on a number of other solutions and evaluate the benefits and collateral effects of each of them to find the right answer.

Q14 **Lord Bridges of Headley:** I want to return to the question that Lord King posited and that I believe Georges started to address. What are the problems that we are trying to solve? To put it to you very crudely and bluntly, the problem that we are trying to solve, or the threat that central banks face, is power and control. Olaf Scholz was quite right when he described Facebook as a wolf in sheep's clothing and went on to say that we must do everything possible to make sure that the currency monopoly remains in the hands of states.

Is that not the simple reason why we are sitting here? We can dress this up as being beneficial to the unbanked, underbanked and everything else, but that might just be spin-offs and side-effects that the private sector can deal with and is dealing with in different ways, maybe not as well as others. This is purely and simply about power. Is that not right?

Georges Elhedery: I think I can summarise your point by saying that if the DeFI space continues to grow at the pace that we are seeing—today, it is worth $2 trillion and, irrespective of the value of some of the volatile cryptocurrencies, its size will continue to grow because particularly younger generations will find it more appealing if they start to see more interest being paid on some of the available currencies—I genuinely believe that we are putting at risk the stability of the monetary system and financial system that is designed today as regulated financial institutions operating under the bank. Some have described it to me as regulatory arbitrage. If we allow more and more of the consumer deposit base to move into regulatory arbitrage and any problem happens, who will foot the bill? Ultimately, this is the moment of truth.

The view of HSBC—I am sharing this openly, because we share it with the Bank of England—is that if the DeFi space wanted to issue stablecoins and wanted us to feel comfortable operating in it, we would aspire to see it regulated like a bank under the jurisdiction of the Bank of England, the PRA and the FCA, and regulated with the right prudential regulations. Whether or not they pose systemic risks will be assessed and regulated as such. That means that they are fully-fledged financial institutions offering services in a new technology, and in that case they may be welcome competition for a bank such as ourselves.

It was said earlier that banks are not innovating. I respectfully beg to disagree. The cost base of HSBC is circa 30bn. I am not giving anything away in a closed period; it is circa $30 billion. About 25%, or $7 billion, is spent on technology, of which about half is spent on running the bank and half is spent on what we call changing the bank—innovation technology—so we are investing a lot in technology. The problem that we face as banks is that we will not launch a new innovation without ensuring that we have the right legal, regulatory and conduct framework to operate it safely, so there is some governance in putting technology out to the market.

The DeFi space is not undergoing any of this governance, hence it can be much faster, but that is the regulatory arbitrage I am speaking about. If they are brought within the same regulation, we maintain the sovereignty and seniority of the central bank and operate on a level playing field where all innovation is absolutely welcome.

Natasha de Teran: What is the problem with control? We all need the payments system; it is a public good. We need money to be able to circulate in our economies; we all need to pay and be paid. If no one is in charge, I do not think we can assume that it will just happen magically. It has not happened in history. I do not know why we would suddenly think that it would happen now in the digital sphere. I think that there is an element of control, and quite right, too.

Q15 **Lord Stern of Brentford:** My question is about the relationship between banks and customers in supervision and having somebody you know to ring up if something goes wrong, as it does from time to time. Of course, as a consumer you get a benefit and the bank gets the benefit of getting to know you a bit and can make a judgment about you without the statistics or relying on the numbers: it looks you in the eye. A CBDC could not do that very easily. Is there a risk that, if they go about monitoring money laundering and so on, they end up being, as it were, overly mechanical with too much information about who you are, essentially damaging your privacy and the relationship you have with the bank, and not necessarily being very good at doing supervision and monitoring for money laundering? Would you regard that as a problem?

I should say for transparency that I joined Midland Bank as a student in 1964 and that I am still with HSBC. Throughout that period, but less so in the past few years, I have known who my bank manager is and he or she has known who I am. It is hard to see how a CBDC could bring the advantages of that relationship and cover money laundering activities.

Natasha de Teran: On the money laundering side, any form of digital payment or electronic movement of money will go through a compliance screening process, I do not think that the CBDC payment process, as opposed to any other form of payment process, would make that difficult. The arrival of a CBDC and the related digital ID arrangements needed to support it might even make in-country screening processes easier, because there will be a new agreed form of identity, which is not in place today.

It is more complicated when we get into the cross-border arena, because we might trust say, America's form of digital ID, but we might not trust somebody else’s, so banks such as Mr Elhedery’s will have problems in dealing with countries whose IDs they do not support.

It is simply a reality that customer engagement is more difficult in the digital sphere, but there will be people behind the wallet providers just as there are people behind our digital banks. I presume that the CBDC rulebook put forward by the Bank, if the Banks proceeds down that path, would ensure that there are arrangements to make sure that consumers can have that contact.

Georges Elhedery: I welcome Ms de Teran’s point. Two models have been envisaged for CBDCs: the so-called direct model and the so-called indirect model.

The direct model would assume that customers have a direct bank account at the central bank and that the central bank manages the account of anyone who is using the currency. To date, no central bank[1] or think tank has recommended that model as being a viable one.

[1] Of any major economy

The indirect model assumes that the central bank delegates to regulated financial institutions the responsibility to perform appropriate customer due diligence and KYC considerations. That financial institution then operates and maintains the account for the customer, but ensures that 100% of the proceeds of that account are deposited with the central bank to reflect the fact that this is central bank money that the customer owns in their account.

In that way, one can leverage the current financial institution's capability to perform all necessary compliance checks on individuals, including KYC—know your customer—as you, Lord Stern, said. Managers can sit in front of their client and look them in the eye—they get to know each other—and perform all sorts of checks on the activity, the source of wealth, the utilisation of the funds, et cetera, to be able to confirm at all times during the relationship that the customer is performing a legitimate activity.

Q16 **Lord Skidelsky:** I want to ask how the introduction of CBDCs changes the relationship between the financial sector and central banks. We have just heard about the difference between a direct system and an indirect system. In the direct system customers have accounts with the central bank. If that direct system was adopted, would it not run the risk of setting up competition between the commercial banks and the central bank? Do I infer that you would not be in favour of that and would prefer a structure of delegation in which the central bank simply regulates financial entities?

Georges Elhedery: Yes, that is correct. We have already recommended that the indirect mechanism is the more appropriate one and that the direct mechanism would be putting competition between the central bank and the regulated institutions that would not be constructive and would run the risk of monetary destabilisation. It is also our understanding that all the central banks with whom we have engagement, certainly the Bank of England, favour the indirect system to avoid exactly that risk.

Lord Skidelsky: Natasha, do you have a view on that?

Natasha de Teran: From the consumer standpoint, while agreeing with everything that Mr Elhedery said, choice and competition are critical, plus there is an element of speed. Asking the Bank of England to do all this—to provide us with the choice of wallets and all the add-ons and so forth that you could possibly do with a CBDC—would be a mistake. It is important to have the private sector involved, not just the banks but technologists, fintechs and other newcomers.

Lord Skidelsky: On the direct and indirect methods, central banks historically had customers who were not just Governments; they were set up as private institutions and there were depositors. No one proposes going back to a system like that.

Georges Elhedery: That is correct. We do not recommend going back to the past with customers having direct accounts with the central bank. I have to admit that even today for bank notes one would not go to the central bank; one would go to an ATM or bank cashier and ask the teller to deliver the bank notes, so there is an indirect mechanism even for the delivery of bank notes.

Q17 **Lord Livingston of Parkhead:** That is a nice segue into a bit of future gazing. Natasha, imagine 20 or 30 years from now. Do we have a central bank digital currency? What should it look like? I will put the same question to Georges afterwards.

Natasha de Teran: It is difficult to look two years into the future, let alone 20 years.

Lord Livingston of Parkhead: That is why we have expert witnesses.

Natasha de Teran: Let us presume that we all have central bank digital currencies. One would hope that within 20 years different central bank digital currencies had found ways to work together to ease cross-border payments.

I know that one of the issues that we wanted to discuss today is the impact CBDCs could have on cross-border payments. Currencies are sovereign and payment systems are generally national. We are all looking at our own national systems and designing for the faults in our payment systems or perceived future faults. When all countries have their own CBDC, if that is the way we go, they will not necessarily work any better than the current payment systems' interface today. One would hope that 20 years into the future we had repaired those faults and cross-border transactions were an awful lot more seamless through central bank digital currencies, but I do not think that we should expect that at the outset.

One might expect many new businesses to have emerged and much smaller, lower-value payments much more frequently. These things could become much more possible using completely digitised and lower-cost payments.

Lord Livingston of Parkhead: I will come back to that. Georges?

Georges Elhedery: Building on Ms de Teran's point, tokenisation is the terminology we use whereby financial instruments are put on the blockchain and are therefore distributable on it—but not only financial instruments. Even art could be put on the blockchain; certification of authenticity can be done through the blockchain and distributed in a tokenised form to multiple buyers. Even real estate may be put on the blockchain and distributed in tokenised form.

If you believe that this has a future, the only way we can take away the risk of settlement when buying and selling these tokens is to have a digital central bank currency that is operating on the same system or platform, and today only CBDCs are the answer to that. Over and above all payment requirements, financial industry development may also require that there is a settlement coin available in that new framework and technology, and CBDCs will be the exact answer for it. Therefore, in

20 years' time the chances are that we will indeed have a form of CBDCs that may have evolved through multiple stages.

Lord Livingston of Parkhead: We have heard a lot about banking and the unbanked. It seems to me that those who wish to be banked can be handled in the same way as they can be provided with other services that maybe they could not financially afford, but there are certain people who do not wish to be banked and, frankly, a CBDC does not sort that out.

Are we getting a bit confused in all this between the big, macro picture, which is control and cannot be done in any other way, and making things better for the consumer in a number of ways? Introducing, say, a centralised government system does not immediately strike one as a way of helping old-age pensioners who do not want to give up their pound notes. Is that a fair summary in your mind?

Georges Elhedery: Yes, indeed. The question of CBDCs for the unbanked may be a relevant question in emerging markets where the banking and financial systems have not penetrated in the way they have in developed markets. In the UK, bank fees are at zero. It is very difficult to be unable to get a bank account, so arguably those who do not want a bank account probably prefer bank notes or want absolute privacy. For the reasons that we discussed, CBDCs will not provide absolute privacy.

Lord Livingston of Parkhead: It makes matters worse.

Georges Elhedery: Yes.

Natasha de Teran: I would agree with that, but there is scope for a CBDC to lay down some rules on the provision of digital money. Maybe you do not need a CBDC for this, but at the moment the likes of HSBC are required to provide basic bank accounts, I believe, for those who would otherwise be unbanked.

That is good, but if I am a person who is not particularly digitally enabled, I still need to pay money digitally because the economy has become digital. I need a simple means of doing that. Not just a means that is accessible, but also affordable. Many of the non-bank e-alternatives are quite expensive. A CBDC could help to lay a framework to ensure the provision of such services. Do you need a CBDC to do that? Not necessarily, but if there was one, I would imagine the Bank would have a mind to ensuring that that happened.

Q18 **Lord King of Lothbury:** I would like to go back to the direct versus indirect choice. The problems in doing it directly are obvious. The idea that the Bank of England will find it easy to offer bank accounts to 50 million people, invest in an IT system that is guaranteed to be secure and does not fail, with the governor sitting at his desk fielding telephone calls from aggrieved customers all day, does not really bear thinking about.

What do you think is the difference between now and the indirect approach that could come in? At present, commercial banks offer bank accounts to customers. These are essentially guaranteed by the Government via the central bank. The commercial banks have such large deposits with the Bank of England in the form of reserves at the Bank that it is almost exactly as Mr Elhedery described the way the indirect approach would work.

What would be the difference between where we are today in practice and where we would be with the indirect approach in future?

Georges Elhedery: I agree with the statement that if indirect CBDC were to be live tomorrow, there probably would be very little change for the consumer. We probably would not see a leapfrog change overnight, if they were available overnight. I agree with that statement.

We put ourselves in a position to explore, brainstorm and analyse, because we fear that the evolution of the financial system is such that more and more financial activity may be performed by non-financial firms and possibly by non-regulated entities.

If we go with the understanding that it is the same activity under the same rules, we run the risk that we let ourselves drift little by little into having two separate financial systems—a regulated one and an unregulated one—with activity in the unregulated one posing more and more risks to the stability of the financial system. Frankly, in the competitive landscape, banks are not able to operate there because they are certainly way outside their risk appetite. From the point of view of company risk, financial crime risk and systemic risk, they are outside our risk appetite.

We feel that at some stage we need to avoid such divergence. Is the divergence here today? It is probably marginal, but is this divergence manifesting itself and possibly growing? I would say that, if nothing is done, there is a clear risk that five years down the road we realise that this divergence is real and we should probably have acted upon it, hence the pre-emptive move to say that, even though the jump between today and tomorrow, if we have indirect CBDCs, may be immaterial, it will try to prevent a path that may pose risks in the future that it may be difficult to dial back from.

Lord King of Lothbury: You do not think that is a question of regulation, as opposed to the creation of a CBDC.

Georges Elhedery: The advice that we have shared with all the regulators we have engaged with is that regulation needs to be implemented for this segment. At this stage there is certainly a good deal of acknowledgement that regulation has to be implemented, but it has not yet. If regulation is applied, effectively we are bringing them back to a level playing field.

You run a risk from there, and although perhaps I am going to another level of detail, it is important to realise this. Let us assume a world where stablecoins are regulated and therefore pose no risks. The commercial downside we see is that stablecoin, unlike commercial bank money and

M1, if you want, is not fungible. Today, if you are an HSBC customer and you are moving money to an account at Santander, you can do it seamlessly. You do not even realise that you have transferred commercial money issued by HSBC to commercial money issued by Santander. For a retail client it looks like it is seamless; you just move your pounds from one account to the other.

In the stablecoin space, that is no longer the case because the technologies are not interoperable. The transition from one to the other will not be seamless, so going forward we run the risk of fragmentation. If it is a pound but it is not fungible with another pound on a different platform, there needs to be a transition from one to the other, probably through more complex hoops than with today's commercial bank money. You transfer money from HSBC to Santander and it happens seamlessly.

We are thinking that CBDCs can unify a platform where everything is interoperable. For anybody who uses that platform, whatever they build on it, that pound is a pound wherever it stands and is fungible with any other pound. Stablecoins are not fungible; they are all equal to one pound, but they are not fungible with each other; they cannot give the same services because you depend on the services of the issuer of the platform. That fragmentation may not be commercially interesting for a consumer.

Lord King of Lothbury: Ms de Teran, what is your perspective?

Natasha de Teran: Not only is it perhaps not commercially interesting to a consumer—that is probably something of an understatement—but the consumer can get locked in, just as we are locked into our airmiles, which are inflated every time we look at our accounts. I think that fragmentation is hugely worrisome for UK plc and UK citizens. Everything that can be done to avoid that is very important.

We have to remember that we are not just thinking about the likes of the sophisticated people who are toying with Bitcoin. Every person in the UK needs to be able to pay and be paid. If they get locked into small systems that can tax them at the entry and exit points and lock them into products and services, that is very problematic. I see that much of the thinking on CBDCs and the decision-making is to try to avoid this future outcome, which I think would be very detrimental to society.

Q19 **The Chair:** We are almost out of time. Perhaps I may put to Mr Elhedery a cliché question. What keeps you awake at night? With your big job and the need to deal with this issue, I am amazed that you get any sleep at all because it is fraught with risks, is it not?

Georges Elhedery: I do not say that all these matters necessarily keep us awake at night. I genuinely think that we are trying to address them in time. There are so many other issues that we have to address. It is probably too late and we should have thought about it earlier, but certainly the issue of CBDCs is one that I genuinely believe we are addressing in time, which means that we can really take the appropriate time to think about it, design it and try to address possible outcomes with a calm head rather than under a sword of Damocles.

There are other pressing issues in life. Indeed, I look after our trading and investment banking activities, and from time to time they certainly try to keep me awake at night.

The Chair: We thank both of you. It has been a really good session and is very helpful to us in being able to spell out some of the risks and actions needed to avert them in the face of this challenge.