HOUSE OF LORDS

Economic Affairs Committee

Corrected oral evidence: Central bank digital currencies

Tuesday 9 November 2021

3 pm

[Watch the meeting]

Members present: Lord Forsyth of Drumlean (The Chairman); Lord Bridges of Headley; Viscount Chandos; Lord Fox; Lord King of Lothbury; Baroness Kingsmill; Baroness Kramer; Lord Livingston of Parkhead; Lord Monks.t s

Evidence Session No. 7 Heard in Public Questions 63 – 71

Witnesses

I: Patrick Honohan, Non-resident Senior Fellow, Peterson Institute for International Economics and former Governor, Central Bank of Ireland; Professor Eswar Prasad, Senior Professor of Trade Policy and Professor of Economics, Cornell University.

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Examination of witnesses

Patrick Honohan and Professor Eswar Prasad.

Q63 **The Chair:** Welcome to this session of the Economic Affairs Committee. We have two witnesses: Patrick Honohan and Eswar Prasad. Thank you to both of you for taking the time today. Perhaps I could begin by asking the first question. How might a central bank digital currency increase the power and responsibility of central banks?

Patrick Honohan: Thank you for inviting me to talk about this interesting topic, which is a novel one for central bankers, but has exploded into prominence in the last four or five years. As to whether this is going to increase the power of central banks, I would rather put it the other way round. The reason central bankers have become interested, and preoccupied in some ways, with this issue is the fear that their ability to deliver what the public expects from them, in terms of financial stability, smooth payment systems and price stability, could be taken away by the emergence of payment systems and payment service providers outside the banking system using new types of payment mechanisms, and perhaps using new, invented currencies.

This could lead to a fragmentation of the financial, monetary system that would leave central banks unable to deliver their mandates. It is more of a defensive action of central banks, seeking not to increase their powers, but to retain their ability to deliver on the mandate that they have. That is the way I would see it.

I saw central bankers' interest in this ramping up substantially at the point when Facebook, which now has the name Meta, sponsored an idea of having its own international digital currency available to all its users. Central banks said, "Wait a minute. This whole business is getting very big and may cause a migration of the monetary system away from us".

It is not a very precise prediction. You might call it a fear of missing out, but that is a bit pejorative. It is a fear that, if they do not act to have their own digital currency in play, or at least have the technology for it in existence, developments will prevent them delivering what they have been trying to deliver for the last 100 years, or 300 years in the Bank of England's case.

The Chair: You acknowledge that their power and responsibility would increase in the process of doing this defensive operation.

Patrick Honohan: I do not really think so. If anybody has a technical innovation, this increases their power to some extent, but I think they are losing their power. Remember it is a power in the public interest.

Professor Eswar Prasad: It is a privilege to offer evidence to your committee from this side of the pond. I agree with Governor Honohan that there is a certain defensive aspect to what central banks are doing, but it is worth thinking about what the motivations of different central banks that are contemplating CBDCs might be. For some, especially those in developing economies, the idea is to broaden financial inclusion and bring more people into the financial system by giving them access to a low-cost digital payment system.

By contrast, in an advanced economy such as Sweden, the idea is to provide a backstop to a payments infrastructure that is entirely in the hands of the private sector. Central bank money is losing its relevance at the retail level in some of these economies. For central banks to remain in the game, as Governor Honohan suggested, having a digital form of their currencies might in fact serve that purpose. However, in a country such as China the idea is to make sure that the payment system is not dominated by two payment providers.

These are all noble objectives, but there is certainly a risk that we might end up with CBDCs tipping the balance the other way. If you think about payment systems, for instance, who can compete with an official payment provider, given the government subsidies that that payment provider would have and the enormous advantages relative to the private sector? Likewise, think about what sorts of actions could be done with a central bank digital currency. I know we will get into this more later in the hearing. Think about government transfers being undertaken through a central bank digital currency account; banking services being provided through a CBDC account; and perhaps even money flowing from commercial bank deposits into central bank deposits. Central banks could end up playing a much more intrusive role in the economy and, indeed, in society more broadly.

After all, all CBDCs will leave digital trails. They will bring economic activities out of the shadows, so the Government might end up using the central bank and the tools that would then be at their disposal to try to make sure that tax obligations are met and that certain cash transfers to households and individuals can be conducted through CBDC accounts. In a worst-case scenario that nobody really wants, including central banks themselves, central banks might become responsible for the allocation of credit in an economy. I do not think we will get to any of these very undesirable outcomes, but we have to think very carefully about the conceptual and technical designs of CBDCs to make sure that we do not move from central banks losing their power to them gaining too much power.

Q64 **Lord Monks:** I would like to probe this particular question a little further with both of you. Although the motivation of central banks might be to protect their existing roles, as Professor Prasad has just said, new powers and responsibilities are likely to accrue. Is it necessary to clarify the abilities that the bank should and should not have at its disposal in a crisis? Are there some areas of forbidden fruit that the bank should not partake of when faced with the ups and downs and the kinds of things that Governor Honohan experienced in the banking crisis in Ireland? Are some areas definitely off limits for a central bank?

Patrick Honohan: It is an interesting idea. After the great financial crisis, it certainly true that central banks that had been operating on a very narrow, restricted set of tools for 20 or 30 years went back to reaching into the bottom of their toolboxes and taking out things such as quantitative easing and tiered interest rates. There were negative interest rates in some countries, although not in Britain.

This caused a lot of people to say, "Wait a minute. These are very powerful institutions. We didn't realise they were so powerful, to some extent". Having multiple tools, even with a limited, narrow range of tasks, does give central bank decision-makers choices: "Should we lower interest rates? Should we buy a little more government paper?" The question being raised is a reasonable one.

I am a little nervous about the suggestion, which you have not made precisely, but which I have seen in other countries, that legislation should delimit when and where central banks should use their toolbox. We know that, in a crisis, action can need to be taken very quickly. If you say, "Well, it's all right to do this, but they should consult with this person and that person; they should allow 72 hours for a decision", all these mechanisms could drastically reduce the ability of a central bank to act quickly in an emergency. That would be my caveat about introducing into legislation some restriction that says, "Only in a crisis and after consultation should a central bank be allowed to use some of its tools". I have seen this in other countries.

Professor Eswar Prasad: There are different ways to structure a CBDC. One way that would provide a lot of flexibility, especially in terms of monetary policy, is to have an account-based CBDC; in other words, every British citizen could have an account with the Bank of England, which might be typically non-interest bearing and might provide easy access to a low-cost digital payment system.

This is all good. Those accounts give you a lot of potential in terms of monetary policy tools. For instance, as Governor Honohan said, you could have negative policy rates, which are a little difficult to implement in a world where you have physical cash. You could easily just announce you are going to reduce balances in a CBDC account by a certain percentage over time. That would incentivise households to go out and spend rather than save. It would incentivise businesses to invest rather than save. That could be good in difficult times.

In the US coronavirus stimulus package, transfers to households were undertaken largely via direct deposits through the Internal Revenue Service information. In cases where such information was not available, you had pre-paid debit cards and cheques sent out, which is quite inefficient. If everybody had a CBDC account, you could basically put money into those accounts. This is what economists have long fantasised about as "helicopter money".

I should emphasise that these are desperate tools for desperate circumstances. No central bank would use them, except in times that are really dire. We have certainly seen very dire times in the last 15 years, and most central bankers are prudent enough to keep these in reserve for truly perilous circumstances. My concern about legislation is that, as Governor Honohan pointed out, this could cramp the ability of the central banks to act in a forceful way when the circumstances necessarily warrant it. Certainly, putting in place some guard rails about what sort of circumstances might be enough to trigger such actions might be useful, but ultimately this is going to have to be at the discretion of central banks.

While these are very useful policy tools, it should be borne in mind that, the more one undertakes these operations such as helicopter drops of money that are really fiscal operations through the central bank, the greater the risk there is of the central bank being seen as an agent of the Government rather than an independent institution. That could have some far-reaching ramifications.

Patrick Honohan: A concern that some people have about central bank digital currencies is this negative interest rate story: that, if you did not have paper money, there would not be this zero-boundary barrier to interest rates. They can go a little bit negative, but they cannot go very far negative.

All central banks that I know have said they do not want to use such a tool. They want to keep paper money in existence indefinitely. They realise that that limits their power of monetary policy, but they still promise to keep it. Under those circumstances, I would see no great problem in legislation being introduced to oblige the central bank to maintain a paper currency despite the fact that a CBDC would still be there. I can imagine that, for the foreseeable future, people would want to use paper money despite the decline in its usage at present.

Lord Monks: This is just a quick follow-up, Professor. What effect might a CBDC have on the central bank balance sheet? Do you have a view on that?

Professor Eswar Prasad: It would give the central bank the ability to act more quickly in difficult circumstances and potentially to expand the size of its balance sheet. Right now, all quantitative easing operations are digital already, so it is not going to make a huge difference to the central bank's ability to undertake those operations. As Governor Honohan pointed out, the marginal effect might come when a CBDC could replace cash, and that is not on the cards for the moment. Every central bank contemplating the issuance of a CBDC envisions CBDC as co-existing with cash, but the reality is that cash is going to largely disappear, organically over time, with the convenience of digital payments abetted by a CBDC.

Lord Fox: The point about keeping cash money running in parallel is interesting, Governor. During the Covid crisis, we saw that people either were forced or naturally moved to digital money quite quickly. What level of continuing use of cash money would be viable to continue to allow it; in other words, if it got down to 10% of transactions being cash money, would the central banks call it in and go straight to digital?

Patrick Honohan: We are far away from that in nearly all countries. Perhaps Scandinavian countries may be moving in that direction. We saw in most countries an increase in the holding of cash, even though there was a reduction in the usage of cash during Covid.

Cash will be around for a long time. Cash is an expensive thing to create, and there will certainly be people trying to penny-pinch in central banks who will ask, "Why not get rid of this altogether?" As a policy tool, I do not think they would want to do that. Around Europe, there are so many central banks that have printed their own currencies, even their own euros, but the cost of that can be reduced and centralised so that it is manageable at the end of the day.

Q65 **Lord King of Lothbury:** My question, given your answers so far, is: what is the point of a CBDC? At the wholesale level, it already exists. Central banks can create reserves for commercial banks at the stroke of a pen or the press of a button. We have seen that happen in recent years. In a sense, we have that already at the wholesale level. At the retail level, Patrick, as you said, it seems implausible that Governments will get into a position in which they prevent individuals withdrawing money from a CBDC in the form of cash if that is what people want to do. There is no monetary policy advantage to a retail CBDC then.

The issue really is how to make the payment system more competitive. It is not obvious that a monopoly provider through the central bank achieves that. What do you see as the point of a CBDC?

Patrick Honohan: This is a very reasonable question, and a lot of people are asking it. In recent weeks, the vice-chair of the Federal Reserve, Randy Quarles, who is near the end of his term now, made a very forthright speech not asking the question, but stating that he did not really see much advantage in this, although he was all right with the Federal Reserve going ahead and studying it.

Say you looked at it from a static point of view and asked, "How do we improve the environment we've got now? What's the most important thing to do to improve it?" You probably would not come up with saying, "Let's provide an alternative in terms of a digital currency held by the general public". But you have to consider the dynamism of the payment system, the growth of big tech firms and the environments that they create, which could now include a closed payments environment. You could have a Facebook, a Google or an Amazon environment. Suddenly, you would have multiple payment systems and currencies. If the central bank were not there, it might not be able to influence those.

It is a question of arming oneself against an uncertain future in which there will be very powerful commercial firms with reach well beyond the financial system whose activities could be damaging to the mandate of the central bank and lead to wider societal concerns. Most central banks do not talk about this too much, but if you ask them about it they will come out and say they are concerned about the monopoly power of, for example, the Facebook Meta organisation, which could be exploited to the disadvantage of the general public.

You may say that is beyond the mandate of central banks but, if they do not think about it, who will? Who will advise legislatures to consider these circumstances? I could go on, but we might come to some of the more detailed, small, second-tier advantages of going down this route later. It is a defensive role.

Professor Eswar Prasad: Lord King, your question really gets to the nub of the issue, which is how a central bank can make sure that people in an economy have easy and widespread access to a low-cost digital payment system and how a central bank, in its role of maintaining financial stability, can ensure the resiliency and integrity of the payments infrastructure. I see a CBDC as a useful tool to achieve this, although not necessarily the only one. It is not easy for the private sector to provide payment systems in many developing countries, and especially in small countries where it cannot be scaled up effectively.

Around the world, we are beginning to see technology provide a solution. Interestingly, two countries where the use case for a CBDC might be the weakest are China and India. In China, there are two payment providers, Alipay and WeChat Pay, that are doing a great job of providing very cheap, very widespread access to a digital payment system that is convenient for both consumers and businesses. They are benefiting from it. In India, the Government have done a very sensible thing by providing a payments infrastructure on top of which private payment providers can innovate to provide efficient services. That might turn out to be a good model for many countries to follow when trying to think about what role the Government or the central bank should play, which is to provide a payments infrastructure and allow the private sector to innovate on top of that, where the Government do not directly compete.

Even in those cases, a CBDC might play two roles. One is making sure that virtually everybody in the economy has easy access to the digital payments system. For instance, that is the objective of the CBDC in the Bahamas. People in many outlying islands do not have easy access to finance. Even in the US, about 5% of the adult population is underbanked or unbanked. You can use Apple Pay easily on your phone, but you need to connect it to a credit card or bank account, so a CBDC could bring more people into the financial system.

Leaving the entire payments infrastructure in the hands of the private sector might be inadvisable. One might think about how to structure a CBDC so that it provides a backstop in terms of financial stability, but at the same time does not encroach on private sector innovation.

Q66 **Lord Livingston of Parkhead:** In this conversation, we have already heard about a fear if the Bank does not do this. "Backstop" is a word you have already used. Turning it round, Professor, do you see any big advantages to being an early mover in a CBDC from a competitive point of view for an individual country?

Professor Eswar Prasad: This is one area in which at least the major reserve currency economies, yours and the US included, probably have less to fear from being a late mover. We are learning a lot of lessons from the experiments being undertaken by countries. Experiments have already been lodged by China, Japan and Sweden. Two countries, the Bahamas and Nigeria, have already issued central bank digital currencies that are available nationwide in principle, although they are not quite so in practice.

We are learning about how to deal with many issues. For instance, take the privacy issue, which is certainly a major consideration from a societal perspective. China, for instance, is designing five grades of digital wallets. Very low-grade digital wallets, which can be used for low-value transactions, have much greater transactional privacy. If you want to use your central bank digital wallet for high-value transactions, you have to meet "know your customer" requirements and make sure that your transactions are legitimate. Technology is giving us ways to get around some of these problems.

Another concern is the potential flight of deposits from the banking system. The Bahamas has solved this in a very simple way by putting a cap on the amounts of deposits that can be maintained in a CBDC account by a household. The cap is slightly larger for businesses. Here, there might be an advantage to waiting, although not waiting too long. There are many potential benefits to be gained from a CBDC, but at least in terms of active planning, and perhaps experimentation, it might be worth starting. For the actual launch, I do not see huge disadvantage to waiting and being a late mover.

Patrick Honohan: Another dimension to this that is sometimes mentioned is that China has got very far ahead in retail payments, including digital payments and a central bank digital currency, which is now at a very advanced pilot stage. It is almost live on a large scale. Will this mean that the Chinese yuan has a chance to become the dominant reserve currency of the world and leapfrog the US dollar? I do not think it will give it that advantage, and I do not know any serious thinker who has thought through this who sees that.

To become a reserve currency requires a number of prerequisites, some of which China does not yet provide and the United States has not lost or, if you like, lost yet. The trade and financial networks that are already in place, and the confidence in government and institutions, all continue to cement the dollar's importance. I do not see that advantage.

There is a smaller advantage in that the design of technical features and requirements from the country that really gets going on international payments based on CBDCs will probably dominate. That is some advantage to the commercial suppliers of technology, but it is a second-tier one.

Lord Livingston of Parkhead: Is it fair to say this is a standards discussion more than anything else from your point of view?

Patrick Honohan: Yes, absolutely. Standards would be very important to achieve. This really moves it to the international sphere, cross-border payments and high, expensive remittances. In order to achieve the improvements that Professor Prasad has mentioned of lowering the cost of remittances from advanced economies to poor economies, you have to have payment systems that work together much better than the current ones do. There is no guarantee that CBDC-based payments will work together well. It requires agreement on standards, interoperability and so forth.

Lord Livingston of Parkhead: Professor Prasad, you have referred quite a lot to the potential impact on consumers that CBDC could bring as a solution to a problem. Do you not think that that is, frankly, a little trivial in all of this? With the rate of fintech innovation, we are getting to the point where the aspects of personal finance in the US are a little bit behind some European and Asian countries, but we should rely on decent regulation and fintech innovation to drive both international and domestic payments and availability of bank accounts. Having a central bank involved in this is not really the answer to that question.

Professor Eswar Prasad: Yes, absolutely. Your question again gets at the objectives we should care about. If we can give everybody in an economy easy access to a broad range of banking products and services, including digital payments and the convenience thereof, one might then question what role the central bank ought to play if the private sector can do this equally well. The reality is that in many countries the private sector is not doing a job in making sure that everybody has access to these payments.

One can have fairly efficient payment systems, but you have to make sure that they reach everybody. Some of the virtues of cash are that, even if you are unbanked or underbanked, you lack digital literacy, you are in a far-off, remote, rural area, or you are old and not technically savvy, you can still use cash. Cash comes through in a pinch when telecommunications or electricity systems break down.

There are still some residual advantages to cash in addition to privacy issues, but there is still something a little disconcerting about the entire payments infrastructure being in the hands of the private sector. You could end up in a situation where, like in China, you have two payment providers dominating the payments space. They are providing very efficient payments, but there is a lack of competition. They control a lot of data, which the Chinese Government have recently started pushing back against. You might not see as much innovation in that space any more.

Here again, I would like to suggest that the Indian approach, where the Government play the right role in providing the infrastructure and making sure that all payment providers guarantee interoperability and easy access, might be the way the Government can underpin the private sector’s key role in this area. There might still be value in keeping central bank money relevant at the retail level and providing a backstop to a private payments infrastructure, but those are not key issues. They are second-order issues.

The Chair: I am conscious that we have done three questions and we are half way through the session. I know a number of colleagues want to get in. Perhaps you could compress your answers, which are very helpful, ever so slightly.

Q67 **Baroness Kramer:** Mr Honohan, if I could take us back to some of your very beginning comments, you talked about central bank digital currencies as a defensive strategy against private stablecoins and their various consequences. Could the same constraint be established through a regulatory structure, or does one inevitably have to move towards a CBDC in order to contain the impact of a few powerful stablecoin companies?

Patrick Honohan: The regulatory solution and approach is the first port of call, and it would be necessary in any case. This is proposed by all central banks, including the Bank of England, which has laid out proposals for how it would regulate private stablecoins. Also, even if and when CBDCs are in place, it is likely that it would be almost invisible to the retail user, who will probably be getting access to this through their bank a commercial bank or some other entity acting as agent for the central bank. The liability will be with the central bank, but all the value-added services and most of the front-end technology will be with private financial service providers. They will still be very much in the picture in terms of where you go first and what you see as a user. It will really be more that the central bank is the backstop, and your claim is on the central bank and not on the financial service provider or the commercial bank.

Baroness Kramer: I have heard both our witnesses today talk in terms of a central bank almost providing a base or backstop, and then allowing a great deal of flexibility to the private sector. Is that enforceable? Can determined stablecoin companies that would see it to their advantage circumvent that, particularly if there is no direct competitor in the form of a CBDC?

Professor Eswar Prasad: Regulation is certainly a crucial issue here. Stablecoins, while they have very noble objectives of providing easy access to a digital payment system, have risks of their own. They could end up becoming like money market mutual funds, which turned out to be not as safe as they seemed to be during the global financial crisis. Similarly, making sure that stablecoin issuers have the right amounts of liquid reserves that are going to stay liquid even in difficult circumstances is important.

Issuing a CBDC would undercut the case for stablecoins if the Government themselves could provide such an efficient digital payments system, although as an economist one might certainly say, “Let a thousand flowers bloom”. More competition is not a bad thing so long as we have regulation in place to make sure that there are no systemic or institution-specific risks created by stablecoin providers.

Q68 **Baroness Kingsmill:** Good afternoon. I will just declare an interest as the founding chair of a fintech and somebody who has not used cash for three years—

Lord Monks: Miserly!

The Chair: You have not bought a drink.

Baroness Kingsmill: I use my little orange card. What level of disintermediation should central banks be prepared to tolerate? What would lead to the business models of commercial banks being made untenable, for example? If that is the case, how concerned should central banks be about that?

Patrick Honohan: Implicit in your question is this evident situation: if I have a bank deposit and I think, "I'd rather have one of these CBDCs of the central bank; I'd feel much safer", or something like that, how can the bank finance itself? This is causing a lot of interest. People are trying to work out whether it is going to be more expensive for the banks to fund themselves. They could issue bonds, which would be nice because they would not have to roll them over every few days. It would be longer term but more expensive.

People have done calculations. If you were a bank shareholder and you believed these calculations, you would not be all that happy. It is not good. It does not wipe the banks out in terms of having a viable business model, but it reduces their profitability.

Of course, there are various solutions to this. The central bank has to decide what it is going to do. It could just say, "Okay, we have an instruction to transfer money from the commercial bank's account to the account of its depositor and give it a CBDC instead, so we'll just reduce the commercial bank's reserves, and it has to build them up in some other way", or the central bank could say, "We need to work in a different way now because we are collecting more of society's savings, and we need to recycle them through the banking system".

There are countries that have collected lots of deposits from banks and recycled them through lending to the banking system, in a different approach to monetary policy. Of course, that moves the risk of a bank failure from the depositor to the central bank, but the central bank has lots of information about that. It is not guaranteed that the end equilibrium will be as much altered from the bank's point of view. It may find that it is receiving deposits from the central bank instead of the customers, or alternatively from the bond markets. To summarise, emergence of CBDC in itself is not good news for the banking system, but the emergence of fintechs and other providers of payment services is not good news for it either, unless it is the provider of the fintech service.

Baroness Kingsmill: That is how innovation happens, is it not? It is through the failures of whatever institution it is innovating in respect of.

Patrick Honohan: Yes, exactly.

Baroness Kingsmill: The Bank for International Settlements has set out ways of reducing disintermediation with, as you mentioned, limits on holdings, applying uncompetitive interest rates, et cetera. If this sort of regulation were imposed, how stringent would it need to be in order to have an impact?

Patrick Honohan: The purpose of the central bank would be to try not to disrupt the system as much as possible. The European Central Bank has also said it will probably think of putting in limits. As Professor Prasad said, they are doing that in the Bahamas and there are similar things in Nigeria, which just started its system. You could manage that, but not in terms of a bank run. If you say, "If you're putting your money into a CBDC, you're going to get 0%, whereas you could get 0.5% at the banks", that is not going to stop a bank run.

Baroness Kingsmill: Professor Prasad, do you have a comment on the questions I have raised?

Professor Eswar Prasad: I just wrote a book called *The Future of Money*, but I still tip my Uber drivers and coffee baristas in cash because of the personal connection it creates. I still have some dollar bills in my wallet. I am one of the rare few in my circle who still seems to use cash, especially when I go to China.

Baroness Kingsmill: Even the beggars have touch machines there.

Professor Eswar Prasad: This is a serious concern. The central bank does not want to be in a position of taking a broad amount of deposits from the general public and allocating credit in the economy, but design solutions are giving us a way around this problem. Both China and Sweden are experimenting with a dual-layer approach to the CBDC where the central bank essentially provides a payment infrastructure, but the CBDC digital wallets are maintained by the commercial banks. These are non-interest bearing accounts side by side with your own interest-bearing deposit accounts. This keeps commercial banks in the game and allows them to continue doing "know your customer" and other responsibilities.

There is a way for central banks to make sure they are providing a payment infrastructure, but not directly intruding on commercial banks. In a financial panic, there is a risk of money flying out of commercial bank accounts to central bank accounts. Here again, by putting caps on CBDC accounts, some of these problems can be avoided. This is going to involve careful thought about design choices.

Q69 **Lord King of Lothbury:** My question is predicated on the assumption that we have a CBDC, so let us suppose one exists. What effect could this have on the transmission mechanism of monetary policy, in two cases: one with a retail CBDC and one with a wholesale CBDC only?

Patrick Honohan: I am not sure that it is going to be a very big effect. The wholesale CBDC will not affect things much at all in terms of the transmission of monetary policy because we already have wholesale digital money flowing between banks and the central bank. The fact that it might be put on a distributed ledger technology, with the possibility of smart contracts and delivery versus payment for securities, is nothing to do with monetary policy.

At the retail level, again, I am not sure that there is an important difference between having cash and bank reserves or a central bank digital currency as the basis on which monetary policy is constructed. It can be managed in roughly the same way. There would be some technical ways of dealing with slight differences.

It might have a very big effect in smaller countries, which might find that because say, the Bank of England, had introduced an e-sterling, everybody had started to use it instead of the local central bank's currency and the local central bank no longer controlled monetary policy to a great extent. We have already seen this in dollarised economies, where 50% to 70% of the bank deposits are denominated in dollars or euros. If there was a digital competitor to the local currency, that might become even more dominant and make it impossible for monetary policy to operate in such countries. I do not see it as a threat for the United Kingdom, but it could be an important threat for many countries, even in the periphery of Europe, let alone Africa and Central America.

Lord King of Lothbury: This would require the central bank issuing the digital currency to extend that privilege to non-citizens, would it not?

Patrick Honohan: That is absolutely right. Baroness Kramer asked whether regulations would be effective. I am sure they would be effective in the United Kingdom or a European Union country, but they might not be effective for a small Central American country where the locals want to use this currency and establish some kind of notional or legal location in the issuing country.

Professor Eswar Prasad: There are going to be some implications not just from CBDCs but from the broader fintech developments, for the transmission and implementation of monetary policy. As Governor Honohan correctly pointed out, and as you of course know all too well, wholesale money is entirely digital already, but one can see the possibility of private banks being able to let out payments and settlements among themselves more effectively without having to use wholesale central bank money. For instance, one could very well envision a future in which the main policy instrument in the US, the Fed funds rate or the discount rate, becomes somewhat less important because banks can settle payments much more effectively among themselves using the new financial technologies, including blockchain, that are evolving fast.

Another issue is what happens if commercial banks become less important, again as Governor Honohan suggested, because they have other competitors nipping at their heels and many of their very profitable lines of business, including international payments, are going to see profit margins being whittled away. We do not know how intra-sensitive these more direct fintech lending platforms are to interest rate changes. In fact, there is some preliminary evidence that they might behave in a procyclical way; in other words, when the central bank tries to raise interest rates to cool down economic activity in terms of inflation, in fact, the shadow lending platforms and shadow banks more generally start expanding credit, which has the opposite effect.

Many of these institutions are not directly connected to the Fed or the Bank of England, unlike traditional banks. How exactly does a central bank discharge its lender of last resort function in a time of financial difficulties when liquidity has to be pumped into the financial system? Some questions that central bankers are going to have to deal with are beginning to bubble up, but this is as much about the broader changes in financial markets and institutions as it is about CBDCs.

Lord Bridges of Headley: This is just a quick, very simple question. If a CBDC is introduced in the UK, the EU or the US, and it is not remunerated, what incentive is there for me as a customer, or someone in the street who, like Baroness Kingsmill, has not used cash, to use the CBDC? Can you just please tell me very simply what the purpose is from my perspective? What benefit will I accrue?

Patrick Honohan: I would say, at present in the United Kingdom, absolutely nothing. You have a reasonably efficient payment system and so forth. Just having a CBDC does not give you an advantage. However, down the road, we might have situations in which you want to make a payment to a poor country, which has established a link between the Bank of England's CBDC and its CBDC. You might find that making that payment out of your CBDC account gets it to the destination much more quickly and cheaply.

Lord Bridges of Headley: Are you saying that the market and innovation are not providing that as they currently are?

Patrick Honohan: No. International payments are terribly inefficient and slow for many reasons, which we might talk about in a minute. I do not want to take too much time on it. They are known to be terribly inefficient. If you look into how much it costs to send £200 to a family member in some country in Africa, you will find that £10 or £15 might go in fees before the other person receives it, which is a terrible situation.

Professor Eswar Prasad: In the context of an economy in which the private sector is providing digital payments very effectively, there certainly is not a strong user case. One could still make the user case in terms of the CBDC catalysing additional innovation and being a backstop for financial instability, but in terms of access and efficient low-cost payments the case is perhaps much weaker in the UK than it is even in the US.

Q70 **Lord Fox:** Happily for the Chair, we have already started to cover quite a lot of this around the effect of CBDCs on the international monetary system. Professor Honohan, you said you did not think the yuan would threaten as a global reserve currency, but you then used an example where a digital currency could penetrate smaller country markets from a retail point of view. Do you see the major change being retail rather than as a reserve currency? Essentially, retail incursions are the most likely.

Patrick Honohan: It is an incursion. I would not say "just retail" in the sense of poor people or something. But in small countries really wealthy people and businesses probably hold their money outside the country anyway, but substantial blocks of money in these countries are transferred into a foreign currency with greater ease than is the case today.

Lord Fox: Professor, is there not a strong possibility for a digital dollar to start to become a de facto reserve currency in quite a few countries where we have seen the paper dollar dominate the local market?

Professor Eswar Prasad: Despite the trope of suitcases of dollars being carried across international borders, most international payments are already digital. There is not going to be, as Governor Honohan correctly pointed out, a huge ramification for the international monetary system more broadly. Certainly, having a digital version of your currency available more widely outside one's national borders could increase its role as a payment currency.

This has been happening with the Chinese renminbi not just because China is contemplating an e-yuan, but because of China's cross-border interbank payment system, which might one day not only be able to communicate directly with other payment systems but be used as a messaging system that does not require the use of the current SWIFT messaging system. As a reserve currency, it is not going to make a big difference because ultimately, for a reserve currency, you need to have a number of attributes on the economic front, including open capital markets and a flexible exchange rate that is market determined, but most importantly an institutional framework that maintains the trust of foreign investors and includes an independent central bank, an institutionalised system of checks and balances, and the rule of law. China has not shown it has any indication of doing so.

The question you raise is a really important one. If digital versions of the dollar or, for that matter, the yuan were easily available outside their respective countries, the currencies and central banks of many small economies and developing economies that lack credible currencies or central banks face existential threats. It is not going to make a big difference to the British pound sterling's role in global finance, but if you are a small economy it could affect the viability of your currency and your central bank.

Lord Fox: Both of you raised the need for standards and interoperability, particularly when looking at international payments. How is that going to come? Is it just going to be "might is right"; is it going to be the biggest and the first that drives those standards; or is there going to be some sort of international process to get those standards?

Patrick Honohan: There is a lot of experimentation going on at the moment, a lot of it under the auspices of the Bank for International Settlements, which is often thought of as the banker's central bank. It has taken the lead in getting other central banks, including the Bank of England, to come together and see how two central bank digital currencies could be made interoperable.

Should they be one supersystem? Should they be two systems that can talk only to each other? Should they be two systems that have a built-in, hard-wired link? These experiments are going on at the moment. There have been some successful ones and some not so successful ones. Out of these experiments, we will see an environment in which, as with VHS or Betamax, some solution is chosen. I hope it will be one adopted by everyone, or nearly everyone, and it will not be fragmented into a China-based one, a dollar-based one and a euro-based one. That would be a big disappointment.

Professor Eswar Prasad: On this front, like a retail CBDC, it is very important for any economy that cares about the future of the international payment system and its role in it to become actively engaged. As Governor Honohan pointed out, many central banks around the world are already partnering in creating projects to experiment with wholesale CBDC that allows more efficient interbank payment and settlement across national borders, perhaps also doing this through so-called multiple CBDCs that link up retail CBDCs as well. Picking up on what Governor Honohan said, it is going to be very important for countries to work together in developing these standards. If you have a fragmentation of standards and lose the benefits of the new technology, you do not gain all that could be accomplished in terms of integration of international payment systems where there are still enormous inefficiencies in cost and speed, not to mention the ability to access payments in real time.

Q71 **Viscount Chandos:** Both of you have used the word "experiment" in terms of other central banks' early ventures into CBDC. You have already both talked about some of the conclusions you have drawn from these. I wondered whether you could end by saying what you would like to see from those experiments that would be most informative to the Bank of England and the UK, if we follow what you advocate as being not in the first wave and taking advantage of learning from those experiments.

Professor Eswar Prasad: There are important benefits to be gained in terms of international payments in particular. Before going too rapidly down this road, there are some key questions to ask. What benefits are to be gained in terms of providing access to digital payments and portals for basic banking products and services to those who may not have them? How can businesses and consumers benefit most from using the new technologies and what role should the Government play there? Should they just be a backstop for the private payments infrastructure, or should they actively take a role in catalysing this innovation, perhaps by providing a payment platform, as India has done? How should the Government envision their role in protecting the data that will be collected by these payment platforms?

These are all the sorts of issues that need to be addressed before plunging too far ahead in terms of a retail or wholesale CBDC. I know that the Bank of England is wisely already thinking very seriously about these issues.

Patrick Honohan: I fully agree with what Professor Prasad has said. Some specific things are being learned from the experiments that allow central banks and, indeed, the legislatures that have to legislate for this in some cases to narrow the range of options. When people started looking at this three or four years ago, there was a very wide range. Should we have a token-based or account-based system? Should it be on distributed ledger technology or traditional digital technology?

All these questions seemed wide open. Now they are beginning to be narrowed down, to find things that work and have particular advantages. For example, only today, the Banque de France announced the results of some experiments. I was a little sceptical about whether a blockchain distributed ledger technology would really add value. This experiment suggests that it probably does. You can probably do things at the wholesale level. You can add on sophistication and smart contracts, and it seems to work.

These experiments should tell you, "This works. This doesn't work; let's forget about it. Let's concentrate on a narrow range of technologies, and then design the policies around that". That is the way forward, and everybody is learning from this. The Bank of England may not have been as conspicuously involved in experiments, but as far as I understand it is very active in steering groups and discussion groups.

The Chair: On that note, bang on time, we can conclude this first session of the committee. Patrick Honohan and Eswar Prasad, thank you so much. Those have been really informative and helpful answers. Thank you very much for joining us from Ireland and the United States by the wonders of technology. It has been a very useful contribution to our inquiry. That concludes this session, and then we will go back into a real session for the second part of today's hearings. Thank you very much. Goodbye.