



OFFICIAL REPORT
AITHISG OIFIGEIL

Economy and Fair Work Committee

Wednesday 26 November 2025

Session 6



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Pàrlamaid na h-Alba

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ECONOMY AND FAIR WORK COMMITTEE

33rd Meeting 2025, Session 6

CONVENER

*Daniel Johnson (Edinburgh Southern) (Lab)

DEPUTY CONVENER

*Michelle Thomson (Falkirk East) (SNP)

COMMITTEE MEMBERS

Sarah Boyack (Lothian) (Lab)

Willie Coffey (Kilmarnock and Irvine Valley) (SNP)

*Murdo Fraser (Mid Scotland and Fife) (Con)

Stephen Kerr (Central Scotland) (Con)

*Gordon MacDonald (Edinburgh Pentlands) (SNP)

*Lorna Slater (Lothian) (Green)

*Kevin Stewart (Aberdeen Central) (SNP)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Professor David Fox (University of Edinburgh)

Rt Hon Lord Hodge

CLERK TO THE COMMITTEE

Anne Peat

LOCATION

The James Clerk Maxwell Room (CR4)

Scottish Parliament
Economy and Fair Work
Committee

Wednesday 26 November 2025

[The Convener opened the meeting at 09:30]

Subordinate Legislation

Public Procurement (Agreement on
Government Procurement) (Thresholds)
(Miscellaneous Amendments) (Scotland)
Regulations 2025 (SSI 2025/299)

The Convener (Daniel Johnson): Good morning, and welcome to the 33rd meeting in 2025 of the Economy and Fair Work Committee. We have received apologies from Sarah Boyack, Willie Coffey and Stephen Kerr.

We have two matters to consider in our public deliberations this morning. The first is consideration of subordinate legislation. The instrument, which is subject to the negative procedure, amends the financial thresholds for when Scottish procurement regulations apply to the award of contracts. The Scottish ministers update the thresholds every two years to reflect currency fluctuations.

No motion to annul the instrument has been lodged. I invite the committee to note the instrument. Do members agree to do so?

Members *indicated agreement.*

Digital Assets (Scotland) Bill:
Stage 1

09:31

The Convener: We move to the opening session of our stage 1 consideration of the Digital Assets (Scotland) Bill. I am delighted that we have with us Lord Patrick Hodge, deputy president of the Supreme Court of the United Kingdom; and Professor David Fox, professor of common law at the University of Edinburgh. Both were members of the expert reference group on this area that the Scottish Government convened.

Neither witness has asked to make an opening statement, so I will open up the discussion. At the outset, I would like to say that, with the exception of Murdo Fraser, none of the committee members is a lawyer, so please bear with us if the questions that we ask are basic.

Having looked at the bill and read the expert reference group's report to the Government, I ask both the witnesses whether you are content that the legislation meets the requirements and suggestions that you made in your report. Lord Hodge, I invite you to answer that question first.

Rt Hon Lord Hodge: The answer is yes. The background to the bill was that people have been treating digital assets as property, although it is not clear that the law recognises them as such. There have been several national and international initiatives to recognise digital assets as property. The ERG—the working group—thought it appropriate that Scotland should protect its financial technology and asset management industries by putting the matter beyond doubt in Scots law.

The paradigm in current technology is the distributed ledger system, of which blockchain is the most well-known example. However, technological developments in future will create new forms of digital assets. The aim of our report was to recognise as property things that people in the commercial world are already treating as property. Our aim was to be technologically neutral and to provide a minimum of definition in the legislation, to allow for unforeseen technological developments and commercial innovation.

The problem that we were addressing is that digital assets do not fit neatly into current legal classifications of property in Scots law. That is the same problem as the one that the Law Commission in London faced in relation to English law; its work on digital assets has led to the passing in recent days of the Property (Digital

Assets Etc) Bill in London, which awaits royal assent.

In London, they have created legislation that recognises as a form of property something that does not fit into the standard English classifications of things in action and things in possession. As there is a considerable volume of commercial case law in London, the Law Commission recommended a very short bill that would simply recognise the possibility of there being that third category of property.

In Scotland, we are dealing with a different legal system, and we do not expect the Scottish courts to have the throughput of case law on the same scale as exists in London, which is why we have recommended that the Scottish bill should have more provisions to clarify how digital assets fit into our wider law, such as how the ownership of digital assets is transferred, and the application of certain general principles of Scots law.

After we produced the report and the Scottish Government chose to go ahead with our recommendations, we had very productive meetings with the parliamentary drafting team on the terms of the bill. I would like to record our appreciation of the work of the parliamentary drafting team, who performed very well; we admire the skill with which it conducted its work.

That is a rather long way of saying that, yes, we think that the bill reflects our recommendations.

Professor David Fox (University of Edinburgh): I have very little to add to that. I would merely like to emphasise that the bill is designed specifically for Scots property law. Peculiarities of Scots property law need to be allowed for in the definition of digital assets. That said, the bill is designed with a mind to developments in other legal systems and international conventions that govern digital assets, notably the Unidroit principles and the work of the Law Commission in England and Wales, which led to the bill to which Lord Hodge just referred. The Digital Assets (Scotland) Bill is an internationally informed piece of law reform, but one that is designed specifically to meet the doubt that has been mentioned around the existence and categorisation of digital assets in Scots property law. So, my answer to your question is yes.

The Convener: Colleagues will delve into some of the details in greater depth but, having looked at the definition in the bill and at your report, two questions occur to me. In essence, the definition in the bill requires the asset to be “rivalrous”. I wonder whether potential issues exist there, in relation to the exclusivity that that might or might not confer, because not all digital assets are rivalrous—although some things might have

restricted access, they might not necessarily be exclusive or unique.

Likewise, might we inadvertently capture digital objects even if we do not seek to do so? For example, although some objects might confer exclusive or rivalrous control, they are not non-fungible tokens—which I believe is the terminology used for financial exchange—but only a matter of information technology security passcodes and so on. Does an issue exist with regard to the inadvertent capture of other aspects that we are not seeking to capture in the legislation?

Professor Fox: May I begin with a general comment about the definition?

The Convener: Please do.

Professor Fox: I will then go into some of the technicalities that you raise about its application.

The general point is that there are different ways, including different legal ways, of defining a digital asset. Any definition that we formulate is always expressed in terms of the purpose of that definition. This is a definition that has the purpose of recognising or clarifying the status of digital assets as objects of property for private law purposes. Some of the terminology that we use—such as “rivalrous”, which is not a word that you generally find in ordinary discourse, nor, by the way, one that is easy to pronounce—is a way of picking out key characteristics of digital assets in order to recognise their status as objects of property.

The definition is formulated for the purpose of property recognition. I will make a quick comparison before I go on to more detail. There are other legal definitions of digital assets in legislation in the UK. Notably, for example, there is one in the Financial Services and Markets Act 2023 that refers to a

“cryptographically secured digital representation of value”.

That definition works well for the purposes of the regulation of financial markets, but it would not work as a definition for the purpose of the recognition of a digital asset as an object within property law. The definitions are therefore different across the different ranges of application. We have a definition that is designed to capture the key characteristics that a thing needs if it is to work as an object of property.

Another point that might be apparent from some of the consultation papers is that this is a legal definition for property purposes, but many people in ordinary discourse will talk about digital assets in a much broader and looser way, so there will be some things that some people will think of as or call digital assets that do not necessarily meet the definition. To some extent, they are deliberately outside it because they will not work for the

purposes of property recognition, but there is also the point, which you make, that we need to be sure about not inadvertently overincluding and capturing certain other kinds of things that might appear to fall within its terms but which should not be within its terms. The second one is actually easier to deal with first, so I will do that one first, if that is all right.

You mentioned passcodes or access codes, such as a private key that might enable a person to transact with their digital asset on the system. That private key would not actually be a digital asset. It would, nonetheless, be protected by law, through a different kind of regime. Your private key, for example, would be confidential information. It is protected through that legal route, but it would not pass the test required to be a digital asset and therefore qualify for the very special kind of property protection that would come from that property status. The nature of rivalrousness would prevent certain kinds of related confidential information from coming under the terms of the bill.

On what is included in the definition, there are many things that, in general usage, people may refer to as digital assets, but they will be deliberately outside the definition because they will not pass the tests contained in section 1(1) of the bill. The main reason why they are outside it is not inadvertence but the fact that they simply would not work if we were to treat them as property according to ordinary property principles worked up by the general law.

One of the common examples that people give is to say that a person's private email account is in some sense a digital asset, but it is not a digital asset for the purposes of the bill because it simply could not be property according to the ordinary understanding of what property actually is.

The definitions that we have in section 1 are general criteria about what makes things workable as property, and, therefore, certain kinds of assets do not fall within those definitions; they are deliberately outside its scope. Does that address some of your concerns?

The Convener: I think so. [*Laughter.*] I might need to go away and consider that.

Lord Hodge, do you have anything to add?

09:45

Lord Hodge: Not very much. The key concept of rivalrousness—which is, indeed, a difficult word—is that you cannot sell the same thing twice. Once you have transacted the thing and have given it to someone else, you no longer have it and therefore you cannot give it to a third person. That is an essential quality—and limiting factor—of

property. If I want to send a photograph of my grandchildren that is on my phone to their uncles and aunts, I can do so, and they can receive it, but I will still have the photo. That is not property, because it is not rivalrous. That is just an example. It is a limiting factor designed to reflect the nature of a property right.

The concept of a thing existing
“independently from the legal system”

is designed to achieve the same effect. A tree would be a tree, even if there were no Scots law, and my wallet would be my wallet, even if there were no legal system. People treating a thing independently from the legal system gives the thing its characteristic as property.

The Convener: Thank you.

Michelle Thomson, the deputy convener, has a brief supplementary.

Michelle Thomson (Falkirk East) (SNP): Good morning. I, too, want to qualify anything that I might say by making it clear that I am not a lawyer. If you think that I have asked a ridiculous question, please suppress your laughter.

I have been wondering about the definition of a digital asset. I know that you will have considered the advent of artificial intelligence, particularly generative AI, where an asset might be part of the whole generative thing. As a result, it will be evolving—it will never be the same thing twice. That whole part of a particular package might have some definition or some descriptor around it, but it could be eternally evolving. At the point at which the packet transfer takes place, the packet will be the descriptor of the generative AI piece of technology, and that will be the only thing that we will have to hang on to.

How do you square off that kind of situation with your definitions thus far? I appreciate that you have taken cognisance of that by making things as simple as possible, because we do not know what we do not know. However, that is, I think, one of the key challenges, and, indeed, we are not that far away from that.

I hope that I have been sort of clear.

Lord Hodge: I am not a technical person; I am merely a lawyer, and I claim no expertise in the world of AI. However, it is going to pose serious challenges to our legal systems—to our law of contract, our law of delict, our law of intellectual property and so on. Of that, there is no doubt.

We have not sought to address the phenomenon of what is created by AI in our recommendations or in the bill, but if AI were to create something that met the definition in the bill, that thing would be a digital asset. If that which AI

created did not meet the definition, it would not be a digital asset.

We have not sought to tackle AI. Doing so is going to be a major problem, both nationally and internationally, for lawyers to get to grips with.

David, do you want to add anything?

Professor Fox: The definition in the bill is not directed specifically at AI-generated entities. The big question with regard to definition would be whether that kind of evolving entity was in some way rivalrous. That would, I think, depend on the existence of some kind of programmed or human control over the way in which the system was generating the entity. That would then become almost a question of digital fact and evaluation, measuring the operation of that system against the general criterion of rivalrousness.

One other point is that, irrespective of whether we treat that AI-generated evolving entity as a thing for the purposes of ownership, other kinds of property right may be recognised in relation to it. In other words, there may be a question whether that AI-generated entity is the subject of some kind of intellectual property right such as a patent or a copyright.

Property involves a lot of different kinds of rights and related regimes, and it may well be that other parts of property law, in particular intellectual property law, would provide the forms of control and protection for the sort of entity that you have in mind.

Lord Hodge: I would just add that we have had a case in London about patentable rights, in which an inventor was arguing that his AI machine had created a new device that should be patentable. That ultimately involved interpretation of the current patent legislation, and we, in line with most other European countries looking at their own patent law, said, “No, it’s not patentable because our legislation assumes human agency.” That is part of the problem that we are facing: our laws of contract, delict and intellectual property all assume human agency. If a machine creates something, at the moment, our laws do not cope with that. That gives you an idea of the extent of the challenge that we are facing.

Michelle Thomson: I can see how you are making that backwards link into other areas of law at present, but I still think that there is a potential challenge. Something would be flushed out if there was intrinsic value—somebody would come forward; that is the nature of it. However, if there is something that lets in the amorphous thing that is constantly changing, I think that it will be very hard, unless somebody steps forward with regard to believing in intrinsic value or it butts into other areas of law.

I do not expect you to have the answer to that, because we do not even have the questions. I suppose that it is about fleshing out sufficient flexibility in what has been determined thus far to at least take account of what we think that we are starting to imagine some of the issues might be. It sounds like you are more confident about that.

Professor Fox: You spoke about that amorphous entity having some kind of value associated with it. The way that that would be tested, for the purposes of the bill, would be if the creator—whoever that person or thing might be—of that entity tried to sell the entity to another person: a human being. For the purposes of that kind of transaction, the amorphous entity would need to be a thing, and it may well be that that is where the bill that we are considering would have some traction in relation to it. We would, therefore, begin to ask the question whether that amorphous entity was rivalrous and whether it did exist

“independently from the legal system.”

Clearly, it passes the second test with no trouble. Whether it is rivalrous may just depend on whether there is the necessary human agency controlling the reshaping of that entity, or whether we could say that other people are excluded, in a way, from the reshaping of that entity.

I am working this out in my mind, as you can probably tell, but I can see, in the terms of the bill, some very general criteria that would at least be able to set the question running as to whether one could actually imagine transferring ownership in that amorphous entity from one creator to another creator. That, of course, is separate from the other questions of intellectual property protection that the creator may have in relation to that amorphous entity. There are criteria here that could certainly begin to answer some of the questions that you are asking.

The Convener: I will ask one final question before I hand over to my colleagues. I note that one of the specific recommendations in your report was that there should be clarification regarding trusts, given that it is common for such objects to be held or owned by trusts. On my reading of it, I was not clear that the bill provides that clarification. Are you happy that, given that the bill sets out that digital assets are property and, given that trusts are capable of owning property, they are covered? I want to ask for that clarification, as it was one thing that I noted in your report that I was not clear was in the bill.

Lord Hodge: In introducing the bill, the Scottish Government has gone further than the English legislation, which is really skeletal. However, when one recognises the subject matter as property, our trust law will allow trusts to be created over it. We recommended that one might state that expressly

for the avoidance of doubt, but I am personally satisfied that you can create a trust over a digital asset, as recognised in the bill.

The Convener: I assumed that that was the answer, but I thought I would ask the explicit question, just to be clear. With that, I hand over to my colleague Lorna Slater.

Lorna Slater (Lothian) (Green): I have questions about the futureproofing of the legislation and your comfort with where it currently sits. First, the bill's definition of a digital asset requires an immutable record from the electronic system involved. Could that limit the adoption of future technology if it does not operate as blockchain does currently?

Professor Fox: Yes, we need a futureproof and techproof definition of a digital asset. That is why it is all expressed largely in terms of general property criteria. We are deliberately choosing a definition that is not dependent upon any particular conception of the technical system to which it might be applied. I would not read the definition as being specific to blockchain technology.

If the key word is "immutable", I understand the point that immutability is a concept best known because it is often associated with blockchain technology. One of the supposed features—I will say, selling points—of using blockchain technology to deliver assets is that it is assumed that the blockchain record cannot be changed unless there is some overwhelming change in control of the way that the blockchain operates. The typical assumption is that they are immutable.

We would read that immutability as being a general property feature of any kind of system where property is constituted by records of the sort that we have here. The point is that if some other person has an open or arbitrary power to change the form of the record generally, then, to use a metaphor, it is a very leaky kind of asset; it is not a secure kind of asset. There is a way in which the integrity and the security and, in that sense, the immutability of the way in which the asset appears on the record are essential to its workability as property.

Although the word "immutable" has strong connotations connected to blockchain technology, I see it more as a feature of any kind of record-based system of property. Therefore, this definition would not be confined to blockchain technology, and I do not think that it would be necessarily superseded if other kinds of asset emerged which depended on a different kind of ledger system to deliver them.

10:00

Lorna Slater: If current systems were to develop to allow changes in limited circumstances—for example, in cases of fraud—is it fair to deny any potential property items arising from those systems recognition under the bill?

Professor Fox: Immutability is a relative concept. It is a very strong word, but it has to be read in a practical way as a relative concept. Even if we take those systems which nowadays are generally touted as being immutable, such as the bitcoin blockchain, we know that there are ways of changing the rules of the system, in effect, which might then enable the state of the blockchain to be changed.

If we imagine a system that is designed so that the system controllers have the power to reverse on the blockchain a transaction procured by fraud, for example, I would not necessarily see that as taking those assets outside the definition that is contained in the bill. Some limited power of control expressly provided in the way that the system works seems to be still quite consistent with the immutability of the system.

What would be worse, or what would be a problem, would be if the system could just be tampered with in an unauthorised way, outside the terms of its own neatly defined rules. That would be a problem. You would then have a kind of system that was leaky and where it would become possible just to spend the same asset twice. That would, therefore, deprive that asset of the essential rivalrousness that it needs just to work as property.

I do not see some limited degree of controlled, rule-based interference coming into the operation of the system as being an absolute objection to the rivalrousness of the assets created on that system.

Lorna Slater: Thank you. That is very clear.

Turning to things that will be recognised as digital assets under the bill, tokenisation is an emerging use of digital technology but is not dealt with directly by the bill. Can you share your views on the concept of tokenisation and whether certain types of tokenised assets are likely to be recognised as digital assets under the bill?

Professor Fox: Yes. It may be easiest to begin with an example for the rest of the committee. A tokenised asset would be something like a digitised share security. At the moment, people hold securities—they hold shares in companies—and they will trade those shares on electronic register systems. In the UK, that is the certificateless registry for electronic share transfer—CREST—system.

The development that is already happening—it is becoming mainstream—is that, rather than use those existing forms of electronic register, the securities or the shares are issued on a blockchain. They are connected with a particular token that is created on that blockchain, and the way that people transact with the security or the share is just by transacting with the token on the blockchain. If I want to transfer my share to you, for example, I transfer my token, which is connected to that share, to you, and the rest just follows.

Would those sorts of transactions, which are actually economically more important, I think, than the best-known ones such as bitcoin, come within the bill? Categorically, yes. The token would categorically pass the definition of being a digital asset in the context of section 1 of the bill.

When we say that the purpose of the bill is clarificatory and that it is designed to give reassurance and certainty to commercial actors, it is that kind of transaction that we have in mind. Therefore, tokenised securities would fall within the terms of the bill.

Lorna Slater: My final question is slightly more general. I think that you have covered this, but I am going to get you to say it explicitly for the record. Do you think that the requirement for a potential property item to exist separately from the legal system is clear enough in the bill, given the on-going debate about the extent to which that is possible for digital assets?

Professor Fox: Yes.

Lorna Slater: Good answer.

Professor Fox: I will give my reasons. I will take the general point about the need for independence from the legal system first, and then I will get to your next point, which relates to tokenised assets.

Why do we say that the assets must exist independently of the legal system? This goes back to Lord Hodge's example from a few minutes ago about the tree and his wallet. One characteristic of objects, entities and things that makes them work as property is that they can carry on existing regardless of whether there is a legal system that applies to them. The tree will still be there and is still available to be owned regardless of whether a legal system comes into existence to constitute the notion of ownership of it.

The purpose of the bill is to explain the key features of digital assets almost by analogy, using physical objects such as trees. We put in the criterion of something being independent of the legal system to do that part of the work.

On your question about tokenised securities, those are a peculiar kind of thing. As we have

seen, there is a token that is being transacted with on the blockchain, but that token is linked or connected in some way to the security that it stands for.

There might be doubt about whether tokenised security of that sort really does exist independently of the legal system, because the security is a creature of law in the way that a tree or a wallet is not. I do not see that as a problem. The main thing is that we need to know that the token that is connected to that security is property.

I could leave it there, but there is one more stage that I could talk about, although it might get a little technical. The tokenised share—the tokenised security—is a kind of composite.

Lorna Slater: It is a record.

Professor Fox: Yes. It is a record that is made up of more than one component part. There is the record that says it is in your name as opposed to mine, for example. There are all the legal rights, which are created by law, that confer upon you rights against the issuer of that security—those do not exist independently of law—and there is the token. The whole thing is a composite that comes together. The bill targets the bit of that composite that is still uncertain—the status of the token itself being property in law. There is no doubt that the share is property. That is traditional, standard property law.

Kevin Stewart (Aberdeen Central) (SNP): I will ask about acquiring and transferring ownership. Some aspects of that were covered earlier, in the discussion about the Westminster bill, including the third classification that Lord Hodge mentioned.

The Law Commission in England and Wales considered the concept of control of digital assets to be too nuanced to be helpfully codified in legislation. Do you think that the bill benefits from the use of control as a concept?

Professor Fox: Yes, for these reasons. For one thing, this bill goes further than the Westminster bill, in that it attempts, in section 5, to provide some—very general—definition of what control would have to consist of. In that sense, therefore, it is more prescriptive than anything that the Westminster bill contains.

There is a reason for that. The Westminster bill is entirely premised on the assumption that it will leave a great deal more of the general working out of the content of digital assets to be done by the judiciary in the course of deciding disputed litigation. We in Scotland are slightly more prescriptive than that, because we do not contemplate the same volume of litigation coming before the Scottish courts. That explains why there is an attempt in the bill to define what “control” means.

The second point is that, if you look hard at the definition of control and you start thinking about some of the more complicated control arrangements that apply to digital assets, you see that there are difficult cases on the margins. For example, there are some cases in which more than one person has some share in the entire control of a digital asset. We call those “multisig”—multisignature—arrangements.

None of that is expressly provided for in the bill, but, again, that is deliberate. We contemplate that the way in which the bill’s definition of “control” works will be read in the light of well-established industry practice. In particular, we know that, through the UK jurisdiction taskforce—UKJT—initiative, work is already under way on technology to formulate general, system-neutral definitions of what “control” might mean in the context of digital assets.

We provide a very basic definition of “control” in the bill, but official guidance, as it were, will come from the UKJT about how one would apply the general concept of control in some of its more difficult applications. All of that will be publicly available. The work has been going on for the past year or so, and something should come to light—I hope—early next year.

Kevin Stewart: It could be argued that exclusive control is a legal fiction in many real-world situations relating to digital assets—for example, when private keys are shared or assets are held in digital wallets. That leaves much to the presumption of exclusive control in the bill. In your opinion, is that the best way to legislate?

Professor Fox: Yes. The exclusivity of the control is, in a way, not so much a function of the digital applications of how transactions might get authorised; it is one of the key property criteria. There needs to be some notion of exclusive control in order to make the asset rivalrous, in order that it can work as property.

Having said that, there are, as I mentioned, difficult cases on the margins, in which you have a digital asset in the wallet or in which more than one person has some input into the control and the signing of digital transactions. It is precisely those situations that the UKJT is designed to give guidance on. The simple fact that more than one person has a key that might be used to implement a transaction on the system does not, of itself, give each one of those people exclusive control. It will depend, very often, on the count: how many signatures are required, out of all the key holders, in order to make the necessary transaction on the system.

There are, therefore, ways of determining who has exclusive control, even though, in some situations, shared control arrangements may apply

across more than one person. We expect guidance on that, which judges can work from, in the UKJT’s report when it is published.

10:15

Kevin Stewart: I have one more question, which may well be a daft-laddie question. We have talked about artificial intelligence coming into play. Professor Fox, you talked about a “person” having shared control. What if some of that shared control is held not by a person but by artificial intelligence?

Professor Fox: Yes, that is a problem, and it is another indicator of the more general problem that Lord Hodge has alluded to.

Most of our notions of private law, including ownership, assume that there is a person who can exercise that ownership. However, all the larger problems about how to fit AI into private law are other and different problems, and the bill in and of itself cannot directly address those. It has a more limited range of application, which is just to determine whether the things that are created by human agency or possibly by machine agency can be property within the system.

We do not in any way rule out the possibility of needing to address, at some point in the future, who we attribute the ownership of AI-generated entities to. That possibility is still there. It may well be a problem for another day, but it is part of a much larger problem than the bill can address.

Lord Hodge: I endorse that completely. One of my concerns about the effect of AI on our law is that we will have machines making decisions, and causing people loss. Where is the remedy for the person who is caused the loss? One option might be to give personality to certain machines and require compulsory insurance. There will be various options. However, that is a much bigger issue than this rather modest bill can address. It is a problem to which I am very alive. I have lectured on it merely to identify it as a problem—not, as yet, to give an answer.

Kevin Stewart: Thank you.

The Convener: It is a very interesting topic, but I urge members to move on.

Murdo Fraser (Mid Scotland and Fife) (Con): Good morning. I remind members of my entry in the register of members’ interests: I am a member of the Law Society of Scotland, although I am not currently practising.

There are two issues in the bill that I want to explore. The first is the question of acquisition in good faith, which is covered in section 4(2). The bill provides that someone who acquires a digital asset

“in good faith and for value”

can become the owner of that asset, even if the person who is selling to them is not the owner.

I want to understand the rationale for that and—perhaps for the benefit of the millions who are watching at home, who might not be lawyers—to illustrate it. Let us imagine that Daniel Johnson owns large sums of bitcoin, and that I am a nefarious international criminal in some foreign jurisdiction. I hack Daniel’s account and get access to his key. I then sell his bitcoin to Gordon MacDonald, who is a third-party purchaser buying in good faith. Under the bill, Gordon is protected, as long as he pays “value”, but Daniel has lost his asset and is deprived of it. In theory, Daniel has a remedy against me, but I am hiding in the back streets of Montevideo or Lagos, so that remedy is valueless. Is it fair that, in those circumstances, the purchaser is protected as opposed to the owner of the asset?

Lord Hodge: I will take that question. For those who are listening to the meeting, I will explain the concept of

“in good faith and for value”

and then address your challenge.

The protection given to a purchaser in good faith and for value is a protection for people who are honest in their dealings. It exists in our law of bills of exchange, and it also exists to protect people who obtain property from a trustee who acts in breach of trust. It is a well-established principle in our law.

It involves two separate requirements. You can acquire an asset in good faith without paying for it—a gratuitous acquisition—or you can pay for an asset that you acquire without being in good faith. In either circumstance, you do not have protection. You need both to be in good faith and to have paid for the acquisition. A purchaser in good faith is someone who buys the asset without having notice at the time of purchase that a person other than the seller—the third party—owns, or has a right to or interest in, the asset, and a purchaser for value is someone who has to give a full or fair price for the asset.

Why prefer the purchaser over the owner? I think that you have to look at the principal purpose of the legislation, which is to develop in Scotland, and encourage the development of, the legitimate use of the technology. As Professor Fox said, that will be things such as the transfer of tokenised securities, rather than the slightly wild-west situation in which we currently live in relation to cryptocurrencies.

One of the critiques of the process of recognising digital assets or property comes from Professor Robert Stevens. He thinks that the

whole thing is misconceived because, in his view, cryptocurrencies are a device for speculators and criminals. Of course, there is some truth in that assertion. However, we are looking ahead, and looking at what is actually happening, which is that there are legitimate and proper uses of this technology, and the technology will be used for transferring assets from A to B. In the 19th century, we learned the importance of negotiability: the ability to transfer, in those days, a piece of paper from A to B that gave you a right over another asset, let us say, or a right to demand payment from someone else of money on a certain date—that is the classic bill of exchange.

It was important to encourage the use of those things in commerce to protect the bona fide purchaser. That is why we are doing it as well: to enable the negotiability of these assets from A to B to C without having someone coming forward long after the event and saying, “Well, actually, you got it from B, but B didn’t own it—I did.” It is really to encourage the commercial use of these things that we are creating this negotiability.

Murdo Fraser: Thank you. You have explained the rationale for that choice well, but perhaps I can just tease out some of the detail a little more. What is your understanding of the requirement, in section 4(2) of the bill, for “good faith”? How would that be demonstrated in practice?

Lord Hodge: You would have to establish that you did not know that the person from whom you were receiving the asset had a defective title. The burden would be on you to show that you were unaware of the defect in that person’s title; it would be for you to establish that.

Murdo Fraser: Would there be any requirement on the purchaser in that scenario to have done any form of due diligence, or would it simply be a negative?

Lord Hodge: The whole idea of negotiability is that, if you do not have notice of a problem, you are entitled to take the thing and give value for it, so there would not be a due diligence requirement.

Murdo Fraser: The bill provides that the purchase must be “for value”, but the expert reference group had suggested the term “onerous consideration”. Do you have any view as to why the bill uses different language?

Lord Hodge: I would treat those terms as interchangeable. One often talks about an asset being acquired

“in good faith and for value”.

When we speak about “onerous consideration”, we are using the same meaning, essentially. I have no concern that the meaning has changed through the different wording.

Murdo Fraser: I touched earlier on the issue of a remedy for the true owner who has been deprived of his asset because a criminal has acquired it and sold it on. Some of the respondents to the consultation suggested that some remedy could be provided. Do you have any view on how a remedy might be constructed in those circumstances?

Lord Hodge: I see the remedies as being those of the general law: that, if someone has deprived you of an asset, if he or she has transferred it to another, and if the third person has a good title, you can no longer recover your asset. Your claim will then be in damages against the wrongdoer. As we can see with cryptocurrency, it is of the nature of such assets that they are often difficult to track. We all know that there are bad players who use cryptocurrencies for nefarious purposes, and we know that there are people selling non-existent cryptocurrencies and defrauding people. All that is true.

Our aim is to protect legitimate business, and the methods that are available in the general law should be made available in this circumstance without further legislation. If you can identify the wrongdoer, and if he or she is within the jurisdiction—although they are often not, as you know—you can sue them for damages. The effect of the “good faith and for value” provision will mean that you cannot go against the ultimate acquirer of the asset, in the same way as you could not go against the holder for value of a bill of exchange.

Murdo Fraser: I will ask a slightly different question, to do with other areas of potential law reform. We appreciate that the bill is very tight in the area that it covers, but a number of respondents to the committee’s call for views identified other areas where the law needs to be addressed, such as private international law. Where do the assets exist? If somebody were to die, which law of succession would apply? What is your thinking around further law reform in that area? What work is being done, and how quickly might it proceed?

Lord Hodge: Thank you for that question. An obvious problem when dealing with assets in cyberspace is that they are not located in any particular jurisdiction. There is therefore a need for an international understanding, ideally, of which legal system and which courts of which country have jurisdiction to deal with such matters.

We are acutely aware that we do not live in an ideal world, but, in an ideal world, we would have an international agreement governing this matter. That might be quite a long way away, as getting Governments of countries that are in competition with each other in relation to the development of digital assets to agree such rules will not be an

easy task. In the absence of such an agreement, there would be benefit in establishing domestic rules of private international law to establish a legal system that our courts will recognise and apply to a dispute, and to recognise the jurisdiction of a particular country. That, at least, is a first step, because, in my experience, when countries adopt rules of private international law that other countries look at and find acceptable, they often adopt a similar rule themselves. Therefore, establishing our rules is an important first step.

10:30

The Law Commission in England and Wales is addressing questions of private international law in its current 14th programme of law reform. It has published a consultation paper on the matter and plans to report on that next year. We, in Scotland, should be looking at that. It might be a subject on which the Scottish Government will wish to take the advice of the Scottish Law Commission, or it might ask the expert reference group that Professor Fox and I have taken part in to reconvene to look at that—I do not know, but it is something that we ought to address.

As you will have seen from the consultation responses, other areas of law reform, of which we are aware, have been raised and might need to be addressed. Those include: diligence; the creation of security over property; and getting information to insolvency practitioners to track down these assets, which are quite easy to hide. Those are areas of law reform for the future that we should be thinking about.

Gordon MacDonald (Edinburgh Pentlands) (SNP): Good morning. For clarity, the Law Commission in England and Wales recommended the establishment of a panel of experts to advise judges on technical issues in relation to digital assets. Professor Fox, you mentioned the peculiarities of Scottish property law. How do we ensure that the separate needs of Scots law are adequately considered in relation to this area? Do we need a separate panel for Scotland, or should we have representation on the English panel, if that is possible?

Professor Fox: To recap what I said earlier, as you said, it was a recommendation in the England and Wales report to set up the separate panel. It has now been set up, under the chairmanship of Lord Justice Zacaroli in London. It has convened a group, mainly of what I will call well legally informed tech people. They are formulating notions of what control means for the purpose of digital assets. For one thing, the intention is that their work will be publicly available—it is not a closed club in any way. The plan—I think that this will be true—is that much of what it says about control should be neutral to any particular legal

system. The reason for saying that is that the thinking that underlies the reasoning in this bill, the England and Wales bill and international conventions, such as the Unidroit draft principles, is that control is, in essence, a factual process and that the way we ascertain, for example, what it means to have exclusive control over a digital asset is not peculiar to any particular legal system's notion of property. It is an applied question of technical fact.

Therefore, we fully expect that any guidance that comes from that panel, chaired by Lord Justice Zacaroli, would be applicable in this country. We would be reinventing the wheel to do it all again in Scotland, but that does not, in any way, undermine your point that it would be a good idea to have some specifically Scottish representation, in order to be aware of any peculiarities in the application of control across more than one jurisdiction. However, much of the work is already being done and will be available to us.

Gordon MacDonald: That is helpful.

Would the bill benefit from the inclusion of additional regulation-making powers so that the definition of digital assets and the concept of control could be adjusted in the future without the need for primary legislation?

Lord Hodge: We have a regulation-making power in the bill but, as you have seen, it is designed to deal with consequential, transitory and supplementary matters rather than being a wider power.

I suppose that one could have a power that extended the scope of the recognition of property, but I would be worried about using a regulation-making power that might restrict or remove something from what the Scottish Parliament had recognised as property—that is, remove someone's property rights—because that would raise questions of article 1 of the first protocol to the European convention on human rights, which restricts the removal of people's rights. There is also a constitutional question as to whether one should remove property rights by subordinate legislation.

Gordon MacDonald: Is there a question about being fleet of foot? Digital asset technology is moving faster than any legislation, so we have to have the ability to amend the definition without going through primary legislation.

Lord Hodge: I fully understand that. One of the motives for keeping the definitions broad in the bill was to allow technology to develop. The idea is to be as expansive as we can, within the confines of the concept of property, to allow such development.

A regulation-making power to extend the concept of property to new digital assets is one thing. A regulation-making power to remove property rights from something that already exists is another. One could have a more extensive regulation-making power. My concern is that this session of the Scottish Parliament in the lead-in to the next election is quite short and I am keen to get what we can on the statute book when we can rather than provoke controversy about the extent of regulation-making powers at this stage.

I do not know whether Professor Fox wants to make any other comment.

Professor Fox: I have a small thing to add. Even if there were a regulation-making power to recognise different or new kinds of digital asset, as a matter of fundamental property law those digital assets would still need to fall within the definition in section 1(1). In other words, we do not have a completely open choice about what kinds of digital asset we will call property.

The point is that property law has its own criteria, which make certain kinds of property workable as property, and, in some respects, those do not change. The fact that new kinds of digital asset class might be invented does not of itself mean that we can just include those regardless within the definition. To a degree, the definition exists independently of advances in technical use. Therefore, to reinforce Lord Hodge's point, I would have reservations about including a general power to add new items to the list because, whatever happens, such items must satisfy the definition in section 1(1). Otherwise, they just cannot work as property.

To go back to an example from the start, let us imagine—it is no more than that—that regulators decide to call a private key property. In a way, that cannot work because, even if that thing is called property for the purposes of the bill, it cannot satisfy the key definitions in section 1(1), which reflect fundamental characteristics that any thing that is to be considered property must have. Therefore, there would be quite a strong gravitational argument against adding new items to the list.

Gordon MacDonald: Thank you. I will leave it at that.

The Convener: I have a final question. Lord Hodge referred to what we are talking about being analogous to some of the innovations that occurred in the 19th century. I am always fascinated by the way in which patent law develops; in a sense, that is attempting to provide legal constraints and controls for something that is even more ethereal than something electronic, which is ideas.

Is it fundamentally right that, in the bill, we consider the source of things such as electronic systems, by which I mean where they have emerged from? We have spent a long time this morning talking about the nature of the relationship involving the individual and a register. Would an alternative approach consider the rights and responsibilities that flow from the function of registration, rather than the essential source of the things and where they emerged from? With some of the innovations in the 19th century, the focus was more on the conditions in which the things operated, rather than the thing itself. I hope that that question is clear.

Professor Fox: You have saved the most difficult question for last. [*Laughter.*] You are referring to intellectual property, which is not like the glass in front of me, or like the tree that Lord Hodge mentioned. It does not have an existence that is entirely independent of persons or the legal system. It is, to a degree, an imagined concept, to which we give legal protection. We create intellectual property rights out of nothing. In a sense, there is a certain analogy between that and the digital assets that we are considering under the bill, because those assets are, to a degree, imagined concepts. However, in order for them to work properly, we need to think of them as things that have the necessary preconditions to be workable as property, which involves an exercise in imagination.

That is the analogy, but there is a key difference between digital assets, as we conceive them in the bill, and shares and securities, which are traded on registers—I will address the part of your question on registers. There is an apparent similarity between the way in which a blockchain ledger system or distributed ledger system works and the way in which a share register system or land register system works. The recording of transactions on the register is what gives legal effect to the transactions, with the assets recorded on the register. Shares are transferred on a register by changing the state of the register. That is one of the essential conditions.

The big difference with digital or electronic ledger systems is that they are not legally constituted. Unlike, say, Registers of Scotland and the CREST system, which exist under legislation, there is no legal constitution whatsoever for the existence of a blockchain. It is simply a digital fact. There may be changes in the control and holding of those digital assets on the ledger system, but that is, of itself, of no legal consequence. The only reason why a change in the state of the land register or the CREST register has legal consequences is that the register itself is legally created and can therefore give legal effect to that change.

10:45

Just because the changes are operating on a register recording system does not itself give any legal effect at all to those transactions. That is why we approach them from a different angle, not a register-based angle. We say that we can imagine those things as being items of property because they are rivalrous and they exist independently of the legal system. They have certain tree-like characteristics that make them work as items of property—we can see that from those things. Then, we let the general law of property do its work in relation to them: it recognises ownership in those things and ways of transacting with them. It probably does not work to treat those things as emanations or entities existing on a register and to try to explain transactions with them in legal terms in the same way that we would for ordinary transactions taking place on some legally constituted register, such as for land or traded securities. Does that sufficiently answer your question?

The Convener: Yes. Like with the point about AI, there are a number of other questions to be asked. For the purposes of this morning, your answer to that particular question and your answers overall have been very useful and illuminating.

Lord Hodge: Can I add one further point, if time permits?

The Convener: Of course.

Lord Hodge: Professor Fox referred to historical precedent. One way of looking at what we are doing is that it is something similar to what the great Scotsman Lord Mansfield—who was, in fact, an English lawyer—did to English commercial law in the 18th century. He was the Lord Chief Justice of the King’s Bench from 1756. He looked at what businesspeople were doing in the market and created legal rules to reflect their expectations.

What has happened here is that businesspeople have been using electronic systems to create value and to create what they see as assets that can be sold for value. There was no legal structure around it—it was just happening. The bill builds that up from the base: there is an electronic system that exists and the assets arise out of it. Then, we define how they become recognised as property in our system. We are looking at what people are doing in the real world and converting that into a property right—we are working from the base upwards, rather than, as Professor Fox says, trying to impose on what they have created the status of a legally recognised register. It is for that reason that we have gone down the road that we have gone down. I hope that that is helpful.

The Convener: It is. I reiterate that, overall, this morning's session has been incredibly useful. Are there any final points or issues that the committee should have alighted on or flagged in our questions? Again, I am mindful that we are all trying to grapple with this topic.

Lord Hodge: I have nothing to ask but, as you will have gathered from the session, Professor Fox is considerably more comfortable with the technicalities of this area than I am, so I will see whether he has anything that he wishes to add to that.

Professor Fox: I reinforce the point that this is a relatively limited legal development. It does not in any way close off some of the other questions that you have raised—notably, how the law is going to respond to AI development. That is a separate and enormously difficult question.

There is also a point about the status of such assets in private international law. That is another enormously difficult question, but it is one, at least, on which we know that work is being done that we will soon be able to draw on and participate in.

The bill is a contained piece that solves one part of the problem. There is still more work to be done.

The Convener: With that, I thank Lord Hodge and Professor Fox for their time, insight and patience as the committee has sought to get up to speed with the topic. They have been incredibly helpful.

We move into private session for the committee to consider items 3, 4 and 5.

10:50

Meeting continued in private until 11:27.

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Published in Edinburgh by the Scottish Parliamentary Corporate Body, the Scottish Parliament, Edinburgh, EH99 1SP

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