



Scottish Affairs Committee

Oral evidence: [The Referendum on Separation for Scotland](#),
HC 271-iv

Tuesday 05 August 2014

Ordered by the House of Commons to be published on Monday 01 September 2014

Members present: Mr Ian Davidson (Chair); Mike Crockart; Graeme Morrice; Lindsay Roy

Questions 5935 - 6041

Witnesses: **Professor David Bell**, Professor of Economics, Stirling University, **Dr Angus Armstrong**, Director of Macroeconomics, National Institute of Economic and Social Research, **Professor Ronald MacDonald**, Professor of Economics, University of Glasgow, **Owen Kelly**, Chief Executive, Scottish Financial Enterprise, and **Iain McMillan**, Director, CBI Scotland, gave evidence.

Q5935 Chair: Gentlemen, could I welcome you to this meeting of the Scottish Affairs Committee. We have taken the unusual step of meeting in Edinburgh, because obviously Parliament is not sitting at the moment and we did want to hear the evidence that you have to give us. We are working on the basis that we, as a Committee, want to try to provide information for the people of Scotland about what the possible consequences are of different votes in the referendum. So far, as you may be aware, we have issued a variety of documents, including our latest document, which is headed, “No doubt—no currency union”. We have taken the view, which I think is understandable given the very clear and unequivocal statements that have been given to us by leaders of the Labour Party, the Conservative Party and the Liberals, that the UK parties are not, for a variety of reasons, prepared to countenance a shared currency.

In those circumstances, we do not think it is worthwhile going over old ground again. What we want to explore with you is the consequences of each of the alternatives that are available to a shared currency, both in economic terms and also in terms of what the impact is likely to be both upon industry in Scotland generally and the Finance Secretary in particular. I see that there is a particularly silly letter in the *The Financial Times* today from a group saying that, “You can reopen the issue of a shared currency”. Our view is that a clear statement has been made and policy has been determined, and those that wish a different policy to be determined are of course free to argue that case, but those of us that want to live in the real world and present things to the people of Scotland in terms of what the genuine options are, we want in a sense to move on from that.

I wonder if I could just start off by asking if you could just identify for us what you believe are the main alternatives to a shared currency. I am conscious with five of you, all of whom are capable for speaking for Scotland and the UK—and indeed the world—at some length, but we need to try to control in some way. I am told that the microphones, only two of them as well as mine will work at the one time, so you have to put your microphone on and then off again, otherwise I can translate if there are any difficulties.

Maybe we will just start at this end: David, in terms of the alternatives that are available to the people of Scotland in the event of a vote for separation for our currency.

Professor Bell: The three alternatives that are talked about are first joining the euro, which has largely been written off as a possibility, secondly, Scotland having its own currency, which is a matter of some debate, and thirdly, one that has been talked about quite a lot recently—and I am sure it will engage us this morning—and that is the so-called sterlingisation or dollarisation, both meaning the same thing, but essentially it means adopting sterling as the currency that Scotland would use without any formal monetary union with the rest of the UK, so we would no longer, for example, have the Bank of England as our lender of last resort and so on. This is an issue that has been explored in some detail recently, particularly by the gentleman on my right, but I think probably the two options that we might focus on today would be this sterlingisation and Scotland adopting its own currency.

Q5936 Chair: That is a general view, is it? We normally quite like it if witnesses disagree with each other, because that allows us to have more of a debate and hear what the issues are, but I presume in terms of what the alternatives are there is a consensus that that is the three choices?

Professor MacDonald: Pretty much. I would add to that another form of sterlingisation, which would be a currency board, which has also been articulated, which is in some ways a formalisation of the so-called Panama option or the dollarisation option that David mentioned. So it might be worth touching on that, because that has been advocated by various people as a runner.

Q5937 Chair: Am I right in thinking that that is in a sense a subset of the sterlingisation argument?

Professor MacDonald: I see all three options as basically very similar. The monetary union option, sterlingisation and the currency board, they are all forms of fixed exchange rates, whereby you fix, shall we say, a virtual Scots pound at one for one against the remaining UK pound, if you like. So they are all very similar in that at their core they have a fixed exchange rate, but there are subtle differences, because, for example, with a currency board you would have a monetary authority that may have some control and some supervisory control for the banking system.

Chair: Maybe I could ask Lindsay if he could pick up the issues relating to sterlingisation first.

Q5938 Lindsay Roy: Yes. Good morning, gentlemen. What does sterlingisation really mean and how does it work in practice?

Dr Armstrong: Perhaps I can start by trying to explain what it means and how it would come about. The idea of sterlingisation is that sterling would be the legal tender or the legal currency for an independent Scotland; that is the idea. You could be forgiven for thinking that that is already the case, but there is a distinction here between the Scottish notes that currently circulate and Bank of England notes that circulate. The way things currently work is that Scottish notes circulate, they are issued by the three commercial banks, but they are all backed up and managed by the Bank of England, so the Bank of England manages this process. This was clarified in the 2009 Finance Act, section 6, so it is managed by the Bank of England. If Scotland becomes independent, then it would be quite unusual for the Bank of England to say, “We are still going to

manage what would become a different country's currency". They could be reasonably expected to say, "We are not taking on this role any more, because it is somebody else's currency".

At that point the Scottish Government have to decide what it is going to do in terms of its currency, and that is where it gets confronted with a choice. One choice is that it creates either its own new Scottish notes and buys the Scottish notes existing and exchanges them for new Scottish notes and then it becomes a currency board, so you still have a distinctive Scottish currency, but then it becomes the Scottish Government currency, not the Bank of England currency, or you say, "We are going to buy back these Scottish notes and just accept English notes circulating and say, 'We no longer have a Scottish currency'". You have a choice. The currency board choice is you still have Scottish notes, but then you tie them to the English notes, and it would be the Scottish Government doing the tying, not the rest of the UK government doing the tying. That is one option. The sterlingisation is that you simply no longer have Scottish notes, you just have rest of the UK currency, and now it is just as if you were effectively a region of the UK from a monetary point of view; just like the north-east uses sterling, Scotland will be using sterling, but of course Scotland would be a different country at this point.

Q5939 Lindsay Roy: Where does pegging link into a currency board and sterlingisation to that monetary authority?

Dr Armstrong: With the currency board, the Scottish notes would be pegged, the value would be tied to the value of the Bank of England notes, presumably at one to one. With sterlingisation, there is no need to peg anything, because all you have is Bank of England notes; you just have Bank of England notes. That would be sterlingisation option.

Q5940 Lindsay Roy: Who would be on the currency board and what would be their status?

Dr Armstrong: The currency board at this point would be operated under the Scottish Government, and the Scottish Government presumably would create a monetary authority, because it is required to join Europe, so it would have a monetary authority. One of the parts of the monetary authority would be the currency board, which is usually a statutory part of the board, so it is a legal requirement that you create this and say, "This is how this thing operates. It has full backing" but the overall management of it will be, at the highest level, the new independent Scottish Government, and no longer what it is currently is, which is the Bank of England does the managing of the issuance of the Scottish notes, so a fundamental change on who manages this thing.

Q5941 Lindsay Roy: In the event of a yes vote then and no form of currency union, how would this transition be managed from a currency union to sterlingisation?

Dr Armstrong: In the event of a yes vote, given that the parties of the Westminster Parliament have expressed the view that there will be no formal monetary union, something will have to change to go from where we currently are to where we would be tomorrow. My view of what they will change is that they would issue primary legislation to change the 2009 Act in effect to say the Bank of England no longer oversees the management and takes responsibility for the issuance of Scottish notes. When you think about that, if you do not want to have a monetary union, that would be the reasonable thing to do, because why would you manage the currency of another country? Clearly the rest of the UK's interest, assuming Scotland has become

independent, is to say, “We are no longer responsible for any liability of the Scottish Government from here onwards” and so one way to do that is to say, “We are not managing their currency” and that would require primary legislation, which the UK would be able to introduce to change the 2009 Act.

Q5942 Lindsay Roy: So it would cease to be the lender of last resort?

Dr Armstrong: That is a big question. We have to be very careful. Do we want to go to the lender of last resort now, because it is a big question? I am very happy to. Essentially, the lender of last resort—

Lindsay Roy: Let us come back to that later.

Dr Armstrong: Yes, okay. We will come back to that then.

Q5943 Lindsay Roy: Can you give us examples of where sterlingisation or a dollarisation, as it is called, is currently practised and what the impact has been on the economies of these countries?

Dr Armstrong: There tends to be two types of state: dollarisation is the sort of vernacular for this type of currency arrangement. You can use euros, you can use Aussie dollars, you can use US dollars, lots of different currencies tend to be called dollarisation. One type of country is a city state, Lichtenstein, Monaco, Luxembourg, the Vatican, very, very small places, so those countries that are legal countries, independent countries, may dollarise and they get special dispensation, usually because they are so small.

At the other extreme, you have bigger countries that dollarise typically because they have tried to find a way of stabilising their country and the economic situation, so before that have decent size economies, by which you are talking millions of people rather than tens of thousands: Panama, which dollarised in 1904, the longest-serving country; Ecuador and El Salvador, they dollarised at the end of the last century, so 1999, 2000, 2001 sort of time; Liberia had a high degree of dollarisation, but then became de-dollarised; it was never quite formally, I do not think. So we have a number of countries that have had a high level of dollarisation and then backed off, but the main ones that have officially dollarised, Panama, Ecuador and El Salvador are the large ones. Montenegro is the next one down in terms of size.

Q5944 Lindsay Roy: Why have they gone for dollarisation and what impact has it had on their economy?

Dr Armstrong: For some of the small ones, it is the pure convenience and the country next door to it that had dollarised too, or the pure inconvenience of not having a role, they tend not to have monetary authority and so on. The bigger countries have dollarised in an attempt to try to stabilise their economy. If we take Ecuador, Ecuador had a huge debt restructuring in the 1990s. Restructuring is a euphemism, by the way, for default. I think they had another restructuring in 2006 or 2007. Ecuador did it because they had a lot of economic troubles, a lot of foreign debt and they used this as a way of defaulting on their debt without having huge currency issues at the same time, because they do not have a currency, they are using the dollar.

Panama has used the dollar, as I say, since 1904. It should be pointed out that between 1970 and 2000, Panama was second only I think to Pakistan in having the highest number of IMF packages

in the world, so again, not really a panacea. El Salvador has fared better. In El Salvador, there was political difficulties and economic difficulties that led them to bring it in, but it has had better results for them. So those are the main examples. As I say, it tends move you away from currency risk because you do not have a currency, but it does not disappear, it becomes, "Can your country pay its debts?" and what we tend to see is some of these countries have continued to have debt repayment problems, but then I think it is important to point out that these countries were already in difficult economic situations before they made these currency judgments.

Q5945 Lindsay Roy: If they had debt-related problems, what happens to interest rates and borrowing rates?

Dr Armstrong: It depends on the economic situation of each country. I think one has to take the countries in their context, but overall, the effect is you no longer have currency risk because quite simply you do not have your own currency, you are using the US dollar, but that risk gets transferred into another area and it becomes the credit risk, it becomes the risk that you cannot repay in dollars rather than you cannot repay in your own currency. As I mentioned, some of those countries that have been dollarised before they dollarised had a history of debt default and restructuring, but even after being dollarised, they still continued to do so, in particular Panama. Again, it is important to put it into context: these countries have a lot of other economic problems and so I would not like to leave a suggestion that the act of being dollarised led to these defaults. They presumably would have had problems without being dollarised, that is why they were in this difficult situation.

One final point, if I may, when I say that these countries have become officially dollarised, just to make the position slightly more complicated, they also have their own coins quite often that trade, so it is not as though they do not have their own coins, they do, but their official currency for writing cheques, for making payments, for doing any sort of reasonable-sized transaction is the US dollar.

Q5946 Lindsay Roy: Would it be fair to say then that those countries that have dollarised have been in constant financial crisis or regular financial crisis?

Dr Armstrong: I would say two things. First, those countries were in financial crisis before they dollarised and after they dollarised they have continued to have financial problems. Dollarised countries, Ecuador and Panama, have defaulted while they have been dollarised. There is published empirical evidence to suggest that dollarised countries have more financial instability than non-dollarised countries. That is fair to say.

Q5947 Lindsay Roy: Can we move on to implications of sterlingisation on the banks here? Dr Kelly.

Owen Kelly: Specifically for the banks, if we went down the sterlingisation route, then I suppose I defer to the much bigger and much better-resourced big guns in our industry who have been looking at these issues. I do not mean our own members, I mean Deutsche Bank, Fathom, Barclays Foreign Exchange, Exane BNP Paribas, Credit Agricole, BlackRock, Citi, Commerzbank, UBS, the UBS Chief Economist, Credit Suisse, quite a long list of very big names who have looked at these issues genuinely dispassionately; they are not companies that have any particular political interest in Scotland. This is analysis by some of the top names in the industry and I have just brought them all to one place to see what the consensus is.

Q5948 Lindsay Roy: As a collation of expert opinion?

Owen Kelly: In my opinion, yes, and I think it is what the financial markets are looking at to the extent that they pricing in the possibility of a yes vote. I think the clear consensus that comes through that is that first, going back to the original point made by the Chairman, that a currency union, the views range from highly unlikely to simply unfeasible, so I think the starting point would be that a currency union is not going to happen; that is the clear consensus. But on the other options, I think the consensus is that the most likely outcome would be sterlingisation in the short term with a new currency in the medium to long term, and I am simply reflecting what is said by the industry rather than analysis we have done at our hand, not that we would be in a place to do that.

In terms of the impact, the impact of both of those would be that there would be an expectation that the banks would have to consider their domicile to ensure that they had—and you hinted at it earlier—the proper support through lender of last resort and indeed stability, so I think if we looked at the sterlingisation, and indeed new currency impacts, then there would, according to this analysis, be pressure for the banks to consider their domicile.

Lindsay Roy: That is quite a serious situation. What about interest rates and borrowing rates?

Q5949 Chair: Sorry, before you go on, can I just clarify for the record what this question of “reconsider the domicile” means for real people? What is the effect of reconsidering, and secondly, what is the effect of changing the domicile?

Owen Kelly: It is difficult to generalise, because all banks and all financial companies are different, but there is a number of reasons why, if Scotland becomes a separate jurisdiction for regulatory purposes and tax purposes, regardless of the currency question, that all these things are interrelated, then companies would have to consider where would they best be located in order to serve the customer base on which their continued success is based.

In answer to your question what impact does it have, it was interesting, there was an article yesterday in *The FT* by Sir George Matheson making the point that in his view—it is his view rather than mine—to a large extent the larger Scottish banks, by which I suppose I means Lloyds and RBS, have sort of already moved anyway, therefore it is a process that has already happened, and he refers as well to the ownership or the part-ownership of those institutions by the UK Government. But I think if you did see that kind of move, you would see it having an impact not only in terms of jobs but also in terms of influence and the other supporting professional activities, for example, which having sizeable operations in Scotland gives us.

Q5950 Chair: Can I just be clear what “domicile” means in that regard? There is blocks of flats in the Cayman Islands that are almost collapsing under the weight of brass plates, so they have domiciles of various companies. Now, surely companies in Scotland can just simply move their brass plates and continue to work on in Scotland?

Owen Kelly: There is different aspects to this, and probably more expert people than I am on this panel, but one aspect is if you wish to continue to serve the 90% of your customers who are in the rest of the UK, you have to comply with the regulatory requirements and expectations of the rest of the UK. For example, there are plenty of banks which are foreign operating in the UK to serve all those customers, but they have to comply with the requirements of the FCA as it is

currently set up, which means you have to have certain sizes of operations and you have to have some operations within the jurisdiction that is being regulated, so there is a regulatory aspect to it. There is also a market aspect to it. If you want to serve those 90%, you have to be compliant fully with the Financial Services Compensation Scheme and other requirements like that, so there are some sort of things you have to do within the jurisdiction you are serving. That is the sort of domestic market question.

There are, as I say, much more expert people than I on this, but the lender of last resort question, that is the question of, “Where is your bank domiciled for the purposes of state support of various kinds?” whether that it is liquidity support in terms of when there is a liquidity problem or whether it is bail out, the sort of investments that have been made by the UK Government in RBS, for example, that I think does hinge very heavily on where you are domiciled. My own understanding, and I have often heard it said, is that this is not really a problem, because when there is a crisis, foreign governments quite happily fund banks in trouble: look what happened—so the argument goes—to RBS in America, look what happened to banks who are funded by foreign governments. My understanding is—and others will be far more expert than I—that there is a big difference between liquidity support in times of acute crisis, where the central bank is giving short-term lending to tide a bank over; it is like a bridging loan. That is one situation where I think that where the operations are happening is the defining factor, but when it comes to bail out, then I think that really depends on where you are registered and headquartered and I think that is the distinction.

Q5951 Chair: Can I just continue this question on domicile, because surely the Scotch whisky industry, for example, would say that it is selling—this is more a point for you, Iain—all over the world, and therefore it is able to cope with all the rules and regulations about the health and safety and whatever is necessary, they are able to do it from a base in Scotland. Why should the finance industry be any different? Even though they have to comply with the rules on selling in the rest of the UK, why are they not able to do that from Edinburgh, and therefore it would just simply be another one of the multifarious markets that they are targeting?

Owen Kelly: As I say, because I think the compliance requirements are jurisdiction-based, so it would be possible indeed to run a big international bank from a small market like Scotland, but if you wanted to serve other markets, you have to comply with their requirements. A good example would be HSBC, headquartered in London, registered there, but serving markets all over the world. Standard Chartered would be an even better example. I think they have no business at all in the UK, but all their business is overseas. However, the capitalisation of their operations and what sits behind it is done on a jurisdictional basis increasingly, but as I say, in times of acute crisis, when you are talking about bail outs, it is the home state that is headquartered which is the key matter.

Q5952 Chair: I understand the point about bail outs and extreme circumstances and we will maybe come back to that later on, but in terms of what difference this makes, trading in different locations, surely it does not make all that much of a difference if you are able to comply with the regulations in France or England or the United States from a base in Scotland, then separation will not make any difference at all effectively in job terms?

Owen Kelly: But the difference for our members compared with the current situation is that you have to comply twice over. At the moment you do it once for the market of 70 million. If you have to do it for two separate jurisdictions, you have to comply separately, so as I say, if you are

serving the rest of the UK from a base in Scotland, you would have to invest in things that met the requirements of the FCA and the Bank of England, so that would not only be levels of management and other activities, you would have to make sure you had the right capital support and also you could play your part in the Financial Services Compensation Scheme. So there are clear compliance costs, sort of fixed costs, operating in a jurisdiction. Depending on the nature of your activity, they can be large or small or particularly impact your bottom line or not, but nonetheless, there is a difference between complying separate for two markets and complying for one.

Q5953 Chair: But this point about clear compliance costs might be clear to you, but I am afraid it is not clear to me. What is the scale of clear compliance? Are we talking about 1%, 0.5%, 0.10%, 20%? How many jobs would have to be transferred, one man or woman out of 10,000? If people outside who are not experts in the world of high finance and would tend to steer away from it where possible are trying to grasp this issue, what do they put their hand on to try to identify what the negative or positive impact would be?

Owen Kelly: I think what people tend to, quite rightly, focus on is jobs, because when we talk about our industry, we talk about 100,000 people working in it and that is the figure we tend to refer to. It is not possible to say how many of those jobs are serving UK customers, but I think it is reasonable to observe that the big battalions in that 100,000 are in banking, pensions and insurance, asset management, for example, a vitally important part of our industry. But the numbers of employees, however influential it is in world markets and investment decisions and other things, if you are just looking at job numbers, it is a relatively small proportion, probably fewer than 10,000.

A comparison that one could usefully make perhaps is with Ireland, so Ireland, an admirable jurisdiction who have fantastic success particularly in attracting international financial services activity. The Irish financial services industry in total employs about 60,000. Roughly half of those are working international financial services. This is the business of servicing financial transactions from all around the world, so this is companies like HSBC and Citi and JP Morgan, big names running big operations and we have a good share of that here in Scotland. However, it is 60,000 as against 100,000. To some extent that difference is reflected by the fact that our industry is serving the larger market of 70 million, so quite a lot of the jobs will be serving UK customers, reflecting the fact—as you know and this Committee knows well—90% of the customers that are in our industry within the UK market are not in Scotland or in the rest of the UK. So I would say—and I am trying to answer your question—if you are looking at job numbers, we would make a transition from being part of a large jurisdiction serving a large market to being a jurisdiction serving a much smaller customer base at the domestic level.

You might argue, and I think I saw a letter in *The FT* yesterday or today arguing that if Scotland were a separate jurisdiction, it could make it much more attractive for asset managers and fund managers to come and operate. That is a hypothetical possibility, of course, but it is, I think, the opportunity that people are generally referring when they talk about the opportunities that come for financial services from a move to independence. It is the possibility that you could create a more attractive environment for tax and regulatory reasons. I could see that as a theoretical possibility. There will be many different views on how likely it is to materialise, but as a theoretical possibility it clearly exists. However, as I say, if you thinking about big battalions and job numbers, they will not come through asset management and fund management. The job numbers tend to come through the mass provision of services to large markets.

Q5954 Chair: Yes, but I think, unless I have missed the point, I still have not grasped whether or not that would mean that the 100,000 jobs in Scotland serving the finance industry at the moment would have to become like the Irish example, 30:30, and therefore a lot of those jobs would move away or whether or not some other scenario. Give us a figure. Are you seeing with sterlingisation all bar 10 jobs would remain in Scotland or are you saying that after sterlingisation only 10 jobs would remain?

Owen Kelly: I cannot give a figure, because it is very difficult to break down the industry into those categories. However, I can quote Exane BNP Paribas, a big French investment bank. They estimate that the financial services industry is unlikely to survive in its present guise and they estimate that between 20,000 to 40,000 would migrate to the rest of the UK. I do not know what they base that on, but that is the only estimate I have seen.

Q5955 Chair: That would be 20,000 to 40,000 potentially?

Owen Kelly: That is according to Exane BNP Paribas. That is not a figure that we have come up with.

Chair: Sorry, back to you, Lindsay.

Q5956 Lindsay Roy: Can we just pick up on the issue of sterlingisation and interest and mortgage rates? Is there likely to be any impact?

Owen Kelly: I think from that point of view, from the perspective of the industry, if there is a yes vote, there is inevitably going to be a period of currency uncertainty, even if, without dragging us back to the previous conversation, one believes—as some do—that there would be a currency union, that would take time to negotiate, so there will be a period of time where we will not know what the currency future is and that will have to be managed and obviously there are plenty of examples of how people manage currency uncertainty.

On the specific question of sterlingisation, if we moved to that state, I think there would be a number of issues. One would be, as you have already raised and we may come back to, lender of last resort. The other big issue that I think Professor Armstrong did touch on is if you operate a sterlingisation system, I think there would be some very tricky relationships and negotiations to be had with the EU. Others are much more expert than I am on this: I do not know if it has been tested whether using another country's currency on the basis of a sterlingisation model would be compatible with the EU treaties. That is an open question; I do not know the answer to it. There is stuff in the treaties about having to comply with frameworks around central banks and so on. Could you comply without having a central bank in the normal sense? I think at the minimum it would be a matter for negotiation and it could be quite problematic.

The other issue that again has not really been aired is that if you have a sterlingisation situation, it compares a little with the Montenegro situation, where they are negotiating accession to the EU. One of the issues for them—and I have looked into this and discussed it with some people—I do not think there is an expectation that this issue will be resolved quickly, the process does not allow that, but it is certainly a question whether they, as users of the euro on a dollarised basis, can comply with the treaties now. It feels a bit unlikely that they would be

prevented from joining the EU on the basis they were already using the euro, but sort of on the wrong basis, but the map that we are taking through that process has yet to be drawn up.

Professor MacDonald: Could I just add to that on the Montenegro issue? What Angus was saying, all of the countries that Angus mentioned as examples are very small countries relative to the home country, if you like, so Panama, its GDP relative to the US's GDP is something like 0.002%. Montenegro's is even less, so it is like a fly on the back of an elephant. But the situation in the UK would be completely new territory because an independent Scotland's GDP as a proportion of remaining UK would be ballpark 10%. That is a very significant number and when they propose the sterlingisation option, what they are doing is focusing on the supply of money, the amount of money that is out there, but as economists, it would be remiss of us not to point out there is a demand for money and it is well-known in what we call the currency substitutional issue where you substitute another currency for your own currency that this creates very unstable expectations and it creates shifts in demand for money, which makes the control of the money supply quite difficult.

I think this adds another layer of uncertainty to the whole sterlingisation issue that has not been brought out. I do not think the Bank of England frankly would be passive if Scotland decided to adopt sterling anyway. I think because of the size of the Scottish economy vis-à-vis the rest of the UK, I think there would be important issues of monetary control going on there, so that reinforces the point I think Owen Kelly was making, that this is unlikely to fit in with EU regulations.

Q5957 Chair: Can I just clarify, when you say the Bank of England is unlikely to be passive, what does not being passive mean?

Professor MacDonald: At the moment it is inflation targeting, or it was, so if people are switching money balances around the UK, if they are switching current accounts, then they may start to switch the sterling balances overseas, which could affect sterling, and this is the big issue in these kind of currency substitution situations. Because Scotland is a relatively big economy, that starts to make the control of the money supplied by the Bank of England an issue, so their inflation targets become much more difficult to control if people are uncertain about the future of what is going to happen in Scotland if people are starting to move their funds to remaining UK, but also across to the eurozone, for example.

Q5958 Chair: That is the nature of the problem, but you indicated that the Bank of England would not remain passive and if they are not passive, presumably then they are doing something. What would they do?

Professor MacDonald: It depends on the circumstances. They may have to alter the quantity of money in the economy, which could have spillover effects to what is happening in Scotland, because we would have no control over obviously the control of the money supply. They are going to, as they always have done in a monetary union, focus on inflation in the remaining UK. Inflation in Scotland is going to be moving in completely different directions to what is happening in the remaining UK, so their reaction to an unstable situation in Scotland is going to exacerbate any attempts to control inflation in Scotland, if that is in fact possible in a sterlingisation set-up.

Q5959 Chair: But can I just clarify whether or not the action that the Bank of England would take in those circumstances to react to something happening on its borders would be any different to the

sort of action that you would take to something happening, say, in the United States, in the eurozone? They respond to economic circumstances around them and take various actions to protect their home base. Would there be anything distinctive and different about the action that they would take if it was Scotland using sterling as compared to just simply reacting to events?

Professor MacDonald: Yes, I believe it would be. The sterlingisation option that we have mentioned is not a stable solution, for the same reasons that a formal monetary union is not a stable solution, so everybody knows that is not going to last. Financial markets bring the future forward because it is in their interests so to do. There would be huge uncertainty if we adopt sterling, partly for the reasons I have mentioned just now but also because it is not a tenable exchange rate regime for an independent Scotland, given the structure of a post independence Scotland. If I were sitting in Scotland with a bank account I would be uncertain as to whether we are going to adopt the euro, so if I am uncertain about that I may be moving a proportion of my funds to the euro area. If you think of all actors in Scotland making these decisions and transferring bank accounts or proportions of their bank accounts to, say, the eurozone, that is very different to what would be happening in the UK today in terms of the example you gave. It would have consequences for sterling, which would have consequences for inflation, which would then have consequences for what the Bank of England did.

Q5960 Chair: Would it be a sensible and rational position for people who have bank accounts in Scotland, which perhaps are not necessarily as large as yours, to move their money somewhere else at the moment?

Professor MacDonald: I believe it would. Any uncertainty over what your assets are going to be denominated in will lead rational actors, whether they be individuals or companies, to move their funds into other jurisdictions, and I believe that is happening.

Q5961 Chair: Can I be clear about that? Are you saying that that is happening at the moment, that individuals and corporate actors are moving balances out of Scotland and Scottish institutions into institutions elsewhere?

Professor MacDonald: Yes. I have spoken to CEOs of companies based in Scotland who have moved all of their capital out of Scotland in advance of the referendum.

Q5962 Chair: Is that a rational thing for individuals to do?

Professor MacDonald: I believe it is because of the uncertainty, uncertain expectations about what is going to happen in the future and what your assets, and indeed your liabilities, are going to be denominated in in the future.

Q5963 Chair: I am tempted to ask you where you think we should move it to, but you are not a financial adviser and this is not necessarily the circumstances in which to do that.

Can I clarify on this particular point about companies and individuals moving balances abroad? First, is that the experience or understanding of the rest of the panel and, secondly, do you agree that that is a rational thing for people in these circumstances to do? People do not need to tell us how much is in their balances but just to give us an indication. It is a “have you got a bank account” in England question.

Dr Armstrong: Moving money across borders is something called capital flight. At the moment there is a border—it is called the Scottish Borders—between England and Scotland but there is no economic border for any intents and purposes. If Scotland becomes independent then there becomes an economic border. It does not mean you have to build a big wall but it becomes an economic border because companies that serve the whole of the United Kingdom will have to decide where they want to put their registered office. This gets back to the issue of domicile. You have to have an incorporation or office of registration in Companies House. This is not a warm term that is vague; you have to name an office where you are incorporated or registered at Companies House. You can't be in two places at once so you are going to have to decide in which country, because you would now have two independent sovereign states, you are going to put your offices, so it becomes important. The flows that go between those two countries currently that are called within UK flows become cross-border flows, so they become international transactions. When Luxembourg wanted to join the euro area it had to create its own new balance of payments figures, as Scotland will have to have its own balance of payments figures and its exports of financial services to the rest of the UK become exports of goods and services to what will become a foreign country.

So it does matter where you locate your businesses, but also the place of your registered or incorporated office matters because that is where you are going to be regulated. It is profoundly important and it has to be made clear that it is not an issue of brass plates. This is an issue of you have to have an incorporated office or registered office in one jurisdiction or the other for one legal body. That matters for who is going to regulate you.

Once you have decided that you have your incorporated office, of course you can create a branch or subsidiary in lots of other countries. Branches and subsidiaries have very different meanings. If you are a subsidiary, you are regulated by the country that subsidiary is based in, the deposit insurance that is provided by the country you are based in, and it is legally protected in the country that the subsidiary is based in. If you are a branch, those things are not the same. You are not regulated; you are regulated by the home country. Your deposit insurance is not provided by that country; it is provided by the home country. They are very different models and it is very important to be clear on what people are talking about.

This gets to the question of what should you do with your money. It depends whether it is going to be a branch or a subsidiary in a foreign country. These are the technicalities that start to matter. One thing one can say is that in the period between the vote and when Scotland would become an independent country, until there are legislative changes then everything continues to be the UK. An independent Scotland would not have been created at that point so there is no need to do anything because it would all be under UK regulation. You would have UK deposit insurance, UK regulation and so on. After Scotland became legally independent and the Acts had been changed, because you have to have the Acts to change these things, then you have different legal constituents. That is when people have to decide if they think that deposit insurance in an independent Scotland is the same as deposit insurance in the rest of the UK. That is for people to decide.

Q5964 Lindsay Roy: Professor Bell, could I turn to you about sterlingisation and Scotland's finances and borrowings? What would be the impact there?

Professor Bell: I think this comes indirectly via the issue of lender of last resort and how Scotland would be perceived by the financial markets. Essentially, if you don't have a lender of last resort then somehow or other a fund has to be built up in order to deal with liquidity crises of financial

institutions that are still based in your jurisdiction. If you don't have the Bank of England you have to have something different. What it could be, one possibility and one that is used elsewhere or indirectly used elsewhere, is the strength of the government's balance sheet. A strong government balance sheet means running a budget surplus, which means that tax revenues exceed spending, which means that we would be in a situation different to the one we are in now where spending for a Scottish Government—and the UK is not in a markedly better position but Scotland would be a relatively small country; that is one important difference—exceeds revenues by around 8% at the moment. You have to go from that situation to one where you start to think about building up a fund that ultimately is there to protect your own financial institutions because you do not have a lender of last resort. In the current fiscal situation, it would take some time to build up such a fund because you have to get to the starting block before you can start to build up the fund.

Q5965 Lindsay Roy: How would that be done? What would be the implications for services and taxation in Scotland?

Professor Bell: It would require pretty strong fiscal constraints, which is one way of describing cutting spending and finding every possible way you can to increase tax revenue.

Q5966 Lindsay Roy: So an austerity programme?

Professor Bell: It could be. Of course, one can go too far with austerity programmes and end up cutting off demand so much that the fall in spending causes your revenues to drop as well but it would not mean a period where you could do anything other than be very careful with the public finances.

Q5967 Lindsay Roy: When John Swinney says he is going to borrow £2.4 billion to tackle poverty and the agenda we have at the moment of an adverse situation, an austerity programme and so on, what is that likely to mean?

Professor Bell: If it led to a greater increase in tax revenues than the increase in spending it would be okay, and then that becomes a question of would that happen. My presumption is that it probably would not and that puts further into the future the possibility of building up this fund that you might need to protect your financial institutions.

Q5968 Lindsay Roy: Several commentators have said that sterlingisation would be a disaster for Scotland. Is that your view or what are the key components, the key uncertainties that would make it very difficult to project how Scotland would perform?

Professor Bell: Ronnie mentioned earlier that effectively what we would have with sterlingisation is a fixed exchange rate between Scotland and the rest of the UK. The question is: post independence would it be appropriate to have a fixed exchange rate? If it is not, Scotland might be losing out in competitiveness, which would mean that its long-term growth prospects might be affected. There is an issue about whether because oil is much more important to the Scottish economy than to the UK as whole, that suggests there ought to be a different exchange rate between Scotland and the rest of the UK. A fixed exchange rate works so long as you have broadly the same level of productivity and you are trading a lot to get there. It is not entirely clear, especially if Scotland takes off in relation to its productivity growth, which is one of the

scenarios that the Scottish Government has put forward, that a fixed exchange rate would still be appropriate. I guess my key concern would be whether over the medium to long term, unless the Scottish economy pretty much mirrors what is going on in the rest of the UK, a fixed exchange rate, sterlingisation, would continue to be an appropriate policy.

Professor MacDonald: My concern would be that it would not just be a medium to longer-term issue; it would be a short-term issue because of the oil effect that David mentioned. For me, this is the biggie with respect to designing any sensible exchange rate regime for an independent Scotland, because it becomes a petrocurrency as soon as you become independent. That happens not in the medium term or long term; that happens on day one. There are a number of channels through which that will affect the exchange rate. The most important one is the terms of trade; that is your exports as a proportion of your imports. That is relative price. Prices move quickly; prices move on the day of independence. So that effect kicks in immediately and therefore any form of fixed regime that you care to pick, whether it be a formal monetary union or, as David said, the sterlingisation options that we mentioned, immediately becomes inappropriate because you are a petrocurrency. You can add on to that other issues of broad activity divergences that I believe would happen endogenously but also the Scottish Government has explicitly said it wants that to diverge, which is another well-driven driver of a country's competitiveness or relative inflation. All of these factors taken together mean that on day one of independence any of these sterlingisation options is not a realistic or credible option and is bound to fail.

Q5969 Lindsay Roy: Especially so since the number of people engaged in college education and vocational skills is very low. In fact, in my own authority in five years it has reduced from 40,000 to 16,000, so we have a low skill economy in relative terms to some other areas of the UK.

Professor MacDonald: That may be. This issue is more about price effects and competitiveness effects rather than our skill set, but I believe in the longer term that would have an additional effect as well, yes.

I think the other point to make on currency, which I mentioned earlier, is that financial markets bring the medium and long term forward to today. It is in their interests so to do because if they believe they are going to make a capital gain or capital loss by taking a particular position with the currency they are not going to wait until the medium term; they are going to bring about that crisis today. A very important point to be recognised in this whole debate is that unless you get the exchange rate regime right on day one, I believe there would be economic chaos in Scotland post independence.

Q5970 Lindsay Roy: When you say "crisis", what kind of crisis?

Professor MacDonald: If you were adopting sterling, I think sterling would start to go through the floor, basically, because of the uncertainty that would be creating. There would be capital flight, as we have mentioned, away from Scotland. I do not think you would need to wait until you sorted out the jurisdiction issue. I think it would be in people's interests to move funds more or less immediately because they could see or will see that that regime is not credible. People can also issue financial instruments to take positions on an independent Scotland, which could be very significant.

Q5971 Lindsay Roy: Iain, do you have any comment to make on that?

Iain McMillan: I think the first thing to say is that the CBI has not done any detailed research on these four options. We know what their characteristics are. Our members tell us that they have concerns about the four options. They do introduce a great deal of uncertainty into the business community. That should not surprise any of us from what we have heard from my colleagues here this morning. Our view goes back to the best thing for Scotland would be a formal currency union but that can only take place if the United Kingdom remains intact. The Scottish Government's proposition is that that will remain but the UK Government and the opposition parties have ruled that out, so it is a very uncertain situation for business.

When one compounds that—Owen Kelly spoke about regulation and issues around that—it goes further than that because at the moment in the United Kingdom we have broadly a common set of laws and rules that businesses operate under, whether it is company law, very extensive and detailed corporate governance rules nowadays, taxation and employment law, health and safety law and so on. When a country becomes independent, if Scotland were to do that, then over time it is likely, as politicians react in legislative events that happen, that these common laws and rules would start to diverge and cause more cost for business across the two different jurisdictions.

Lindsay Roy: That is very helpful. Thank you.

Q5972 Mike Crockart: We have dealt quite extensively with sterlingisation but I wanted to go right back to something that Dr Armstrong said. You listed the countries that have used dollarisation and you painted quite a bleak picture of the likelihood of it working, and Professor MacDonald backed that up by saying that sterlingisation is not the long-term solution for an economy of our type. The country that we have not talked about, and perhaps it is because you were dealing with sterlingisation rather than a currency board, is Hong Kong. That is always the one that is held up as being we could be like Hong Kong and that would work on a long-term basis: it is a similar type of economy; it is a complex economy; it is one that has a lot of financial services; that then would be a viable model for Scotland going forward. Can we deal with that part of sterlingisation that we have not touched on?

Dr Armstrong: Yes, you are absolutely right and completely correct to bring that up. The difference is something that in our research we have tried to bring out what for us is the most important issue, which is called debt. Since the currency board was started, Hong Kong has had an almost unbroken string of fiscal surpluses, a remarkable record by anybody's measure, which means that it has fiscal reserves, not debt reserves, of about 30% of GDP. That is the fiscal reserves that it can use to do lender of last resort and so on, in fact do anything it chooses to do. Then of course it has its foreign exchange reserves and Hong Kong's foreign reserves are over \$300 billion. If an independent Scotland got a proportion of the UK reserves—UK reserves are about 70 billion and Hong Kong's are 300 billion—assume you would get 10% of 70, which seems a reasonable approach, so they are completely different. The big difference for Hong Kong and why it can do these things, you are completely correct, is it has lender of last resort and yet it basically pegs itself to somebody else's currency. It can use stabilisation measures. It has China making huge differences to its flows in and out of its border.

Why can it do all of these things? It can do these things because it has enormous reserves that have come through 30 years of fiscal prudence and saving and, absolutely, if a country is in that position you can do those things. If you do not start from that position, you start from the position of taking a reasonable fair share of the existing UK debt, then you are more likely to start off with an 80% debt to GDP ratio rather than having all of these reserves. That is why they are so completely different, because the debt position you start from is absolutely different.

I come at it from a slight different position compared to Ronnie and David but I think we have probably all recognised this point. For Ronnie, the volatility of oil is a key factor in his prognosis. I completely accept that. If you had huge amounts of fiscal savings and reserves you could perhaps manage some of that. For David, to build up the reserves you would need to do lender of last resort you would have to have lots of surpluses, but if you had the savings and the reserves already you could do that as well. But unless there is something I don't know, there are not all of these reserves hanging around. The UK overall is not in a strong fiscal position. Its debt to GDP ratio is going to be about 90% of GDP in 2016. That is what has to be divided up. It is not a country with huge surpluses like Hong Kong has where they can do this. It is a country where the debt to GDP ratio is going to be about 90%. That is the key issue that makes all of this very difficult, because there is a limit to what you can afford to do.

Q5973 Mike Crockett: Let me come back being devil's advocate for a moment. The Scottish Government's position has been that the quid pro quo of not achieving a monetary union would be not taking their share of the debt. If your argument is that it would immediately have a large amount of debt and that would stop sterlingisation happening, what is to stop it working if it does not have the large share of debt? Presumably it is because it would not then immediately be able to start to build up a surplus because it would still be in day-to-day deficit in its spending. Is that the argument for why it can't happen even if it does not take the share of debt and has the poor debt ratio at start-up?

Dr Armstrong: The Bank of England is an institution of the United Kingdom Government, which includes Scotland, Northern Ireland, England and Wales. With Scotland becoming an independent country, it would continue to be an institution of that United Kingdom state. It is therefore backed by the taxpayers of that state. Those taxpayers would not be Scottish taxpayers so the Bank of England would say, "It is not Scotland's problem. It is the rest of the UK's problem". Vice versa, if Scotland blew up, it is not the Bank of England and English taxpayers' problem, it is Scotland's problem. That is what independence means; it means taking responsibility for what goes on in your country. The idea that we can't have another strategy because of this amount of debt so therefore we won't pay the debt, which is I think what you were alluding to, or somehow we won't take our share of the debt or—

Mike Crockett: That is the Scottish Government's position that—

Dr Armstrong: I don't know if there is a clear position actually, but on the proposal you are suggesting, I think most people would say an independent Scotland would be expected to take a fair share of the existing UK public sector debt. That is what the Scottish Government have said they would do. You get into the question of what is a fair share. It is a reasonable question.

Q5974 Mike Crockett: I accept what you are saying, but you are going off on a little bit of a tangent here. What I am trying to do is set up the position where you are saying that sterlingisation cannot work because of the debt ratio and it is not like Hong Kong because they don't have debt and we would have lots of debt. I accept that it is not a stated, "If we don't get this we are not going to take that", but there have been enough hints towards that there is a bargaining tool to be used here that, "If we don't get monetary union then we won't necessarily take the debt". If that came to pass, does that answer the question I posed about what you are saying, that that would make sterlingisation work because it would put us closer to a Hong Kong position where we did not have debt or, because our spending is greater than our incomes, would it still leave us unable to be in that position?

Dr Armstrong: I have got you, yes. If an independent Scotland had no debt for whatever reason you are going to suggest happens in the negotiations, clearly from one point of view other options would become more viable except for two things. One is, as you have quite rightly pointed out, that you may be running a fiscal deficit and you are going to have to generate surpluses if you want to perform things like lender of last resort. It is not just by getting to balance. Hong Kong has had surpluses almost uninterrupted for 30 years. The second aspect is in that process you are presumably going to be issuing some debt in order to generate a savings pool to be able to provide things like lender of last resort and so on and if you are running deficits you are going to have borrow from somebody where you have pretty publicly not taken what people consider to be a fair share of debt. Then you have the consequences, one, for the existing deficits and, two, for when you do start to raise debt what is the price, what is the interest rate you are going to have to pay on that debt, given that you would not, under your scenario, have accepted a fair share of the existing UK debt and all of the things that people like credit rating agencies will interpret that to be?

Q5975 Mike Crockart: To sum up: we are very different from Hong Kong because we either accept a share of the debt, therefore cannot act as lender of last resort in the way that they do or, even if we do not have the share of debt, we can't build up the surplus to enable us to act as Hong Kong does.

Dr Armstrong: It would be more difficult for you to build up a surplus. It is not "can't" here. If an independent Scotland ran large fiscal surpluses over a sustained period of time, options would certainly become available to it.

Q5976 Mike Crockart: But what it would have to do to be able to run those fiscal surpluses would be pretty horrendous?

Dr Armstrong: In short, you have to raise more money than you spend and there is a number of choices you can make on that. That is obviously for politicians to do. You would have to do that for a sustained number of years to generate these surpluses in order to do this. That gets made more difficult if you don't take on any debt at the beginning because the interest rate that you would pay to service whatever debt obligations you would have would be greater. Certainly by running substantial fiscal surpluses for a number of years, Scotland would have a fiscal surplus; it would have fiscal reserves; it would be judged by Scottish citizens and foreign citizens as a country that can have a credible macroeconomic adjustment. That is quite a tall ask, but Scotland will make its own decision so it is one that it can deliver.

Q5977 Mike Crockart: What are we talking about with "a number of years"? How do you build up that credibility?

Dr Armstrong: If you were to have a domestic banking system, by which I mean legally based and regulated in Scotland where Scotland provides deposit insurance, how many deposits are there in Scotland and what proportion of that would you perhaps have to think about for building up this sort of reserve? These are the sort of numbers. We are talking substantial numbers if you were to have the sort of reserves to provide your own lender of last resort operation using fiscal accounts.

Mike Crockart: I think Professor Bell is anxious to come in on this.

Professor Bell: Taking Angus' number of a 30% fund relative to GDP that might support lender of last resort and other activities, we are currently around an 8% deficit. Over four years, if the current Government programme is successful in reducing the deficit, we will get to just about a fiscal balance, so then you have to think about how many years and what kind of annual surplus you would need to have. If you think six years, that means a 5% surplus each year, so a 5% excess of taxation revenue over spending.

Professor MacDonald: Could I add a little point that follows up what Angus said? Angus said that if you build up these surpluses it would be possible to deal with the oil volatility effect. That may be true, I think in part, but of course the oil volatility effect comes in, as I said earlier, on day one of independence. Even if you could do that, it is going to take a long time to build up the kind of reserves that, for example, Norway has built up to do exactly that. Even if you were to engage in an austerity programme, the regime is still a dead duck as far as I can see.

Q5978 Chair: That is right. The operation in the long term might be a success but in the short term the patient has died. There seems to be an element of that.

Could I clarify a couple of points? It has been mentioned on several occasions by the Scottish Government that they would refuse to accept any share of the debt if they did not get their way on the shared currency, and that has quite clearly been trailed as a policy option. What I am not clear about is what the consequences in interest rate terms would be for real people. I understand Mr Armstrong's point about there would be an increase in the interest rates. We seem to have a variety of hallelujahs. I am not sure it relates to this particular point I am making. I understand that there would be an increase in the interest rates for government borrowing for a separate Scotland. I am not clear what that would mean for real people in terms of mortgages and so on. Would there be a complete disconnect so that mortgages would carry on as they are at the moment, irrespective of the rate at which the Scottish Government borrows, or would the mortgages of people in my constituency be directly related to the increase in the borrowing rate that has been applied to Scottish Government debt? Maybe you first and then I will pick up the others.

Dr Armstrong: Mortgage rates depend on the official interest rate plus the risk to the bank of it raising its own funds. The riskiness of banks matters to people's mortgage rates, which is why in the crisis a lot of the mortgage products disappeared and some of the mortgage rates that people paid in the early days of the crisis went up even though official rates were very low. The risks that banks pay matters. What determines the risk of banks? If they are Scottish banks, by which I mean either incorporated in Scotland or subsidiaries in Scotland so they are legally Scottish institutions, then they will be independently capitalised and their credit standing will depend in part on the soundness of the business but also in part on the soundness of the institution that stands behind them. The institution that will be standing behind these subsidiaries and Scottish incorporated banks is called the Scottish Government. In fact, this has been made very clear by rating agencies, which judge banks on two bases now: one is the soundness of the bank and, two, is the soundness of the Government that would be its backstop. They explicitly say that they take this into consideration.

If these mortgage products were provided by Scottish subsidiaries or Scottish incorporated banks then that suggests that the ratings of these institutions would not be as good as they would be as part of the United Kingdom, which suggests that the cost of funding would be higher, which would have a knock-on effect for the cost of borrowing. If they are Scottish incorporated and subsidiaries in Scotland then the sort of scenario you are painting would lead to a higher cost of capital for these institutions, for these banks, and therefore higher borrowing costs. However, if

the mortgages were provided by branches of the rest of UK banks, banks located in the rest of the United Kingdom selling mortgages into an independent Scotland, then it would depend on the funding cost of the UK bank. The UK bank funding cost presumably would be relatively unchanged. On that basis, the mortgage rates might not go up for those sort of mortgage products. You can quite easily see there is a competition issue here of which one would win. This is why it matters where the location of business is.

Q5979 Chair: Presumably in those circumstances nobody in their right mind would willingly have their mortgage with either a Scottish institution or a Scottish subsidiary. They would all want to make sure that their mortgages were with branches of UK institutions, so my constituents should now be going off and just checking what their mortgage arrangements are.

Dr Armstrong: The way that Scottish institutions would respond presumably would be by becoming much safer and sounder than the rest of the UK ones so that when a rating agency looks at them it would say, "The Government behind you may have not taken its fair share of the debt but you are so safe and sound this is never going to be an issue". One of the odd things you tend to see is that countries that have dollarised their banks tend to hold very high levels of reserves because they know fine well there is no government there.

Q5980 Chair: I understand the point about Scotland possibly becoming the El Salvador of Europe, being destabilising, but if the banks wanted to hold bigger capital surpluses this is not something that can be done overnight. On day one of a separate Scotland these capital balances will not have been built up and therefore the impact presumably on mortgage rates for my constituents who are holding mortgages from Scottish institutions or subsidiaries in Scotland will rocket upwards whereas hopefully those who have their mortgages with branches of UK institutions will remain the same. Does that seem right?

Dr Armstrong: Depending on who your constituents bank with. Scottish banking is dominated by Lloyds Banking Group or HBOS and RBS, quite clearly. It depends where they would be located post independence. This gets back to the discussion at the beginning; you see now it does matter where you are located.

Q5981 Chair: That was the second area. I understand that, but as well as Professor MacDonald's recommendation that people move their money, they should also be considering moving their mortgage. Transferring your mortgage from one institution to another tends, by and large, to take a certain amount of time and in these difficult times it is becoming tighter and tighter, but the sensible thing for people to do now would be to check who is holding their mortgage and to consider getting it transferred right away.

Professor MacDonald: Yes, but there is going to be a distinction between assets and liabilities and what I am thinking of there is that if you do move to a separate currency I would imagine that currency is going to depreciate relative to sterling, the remaining UK's currency. Therefore, if it is liabilities you have denominated in the rest of the UK, which would be your mortgage, for example if you have to pay off the principal that is still denominated in sterling, then that could be equally bad news for someone who had switched their mortgage.

Q5982 Chair: I have on my list of questions for a separate currency the cost of mortgages as well.

Professor MacDonald: Fair enough.

Chair: If you work on the basis that the Scottish Government is saying that they will continue to use sterling and if we assume at the moment, which I think is the absolutely correct assumption to make, that there will be no currency union, we are going to have this sterlingisation and in these circumstances not only is it sensible for people to move their deposits, they should also move their liabilities as well in the form of mortgages, since by that they have a higher chance of keeping a reasonable mortgage rate. Is that correct? I can see some noddings but unfortunately Hansard does not record noddings, so I think we would have to have some sort of statement from yourselves.

Dr Armstrong: I will keep my comments short. The domicile and the structure of the bank that is the provider of either your deposit saving accounts or your mortgages will now matter. This is why location of banks will start to matter because it will depend on the regulator and it will depend on the sovereign that stands behind those institutions.

Owen Kelly: I want to add only one observation. Drawing on the analysis that has been done by our industry, there is a clear consensus that if there is a yes vote there will be a relatively modest impact on sterling, although I appreciate there are other views that it might be larger. In terms of the ratings, there is a clear consensus that as an independent country Scotland would have a lower rating than the rest of the UK. If you have a lower rating as a sovereign, I think this linkage still applies even in a sterlingisation situation, that affects the ratings of the companies that are domiciled within that sovereign. I think it can theoretically happen but it is very unusual to have a AAA-rated company within a jurisdiction that is relatively rated lower than that. The relationship between the overall sovereign rating and the ratings that are available to companies within the jurisdiction could also be a factor.

Iain McMillan: Taking all of that into account there is also the question of the durability of the sterlingised area: what happens if it does not endure? It may well be that such a state of affairs would not endure in the medium to long term. That would be even worse, because there are businesses there. This is horribly complex as it is and I have had members tell us how uncertain and complex all of this is. If that state of affairs was to break down then we could see a situation where companies' assets are here but liabilities are over there. Their earnings could be in pounds sterling but their costs go into what replaces a sterlingised pound in Scotland and so on. That would be a matter of very considerable seriousness for business.

Q5983 Chair: Am I right in thinking that there is a discrepancy between what Professor MacDonald was saying and yourself? You seem to be saying that this would not be stable over the medium to long term, but I thought that Professor MacDonald was saying that there was a real danger that the markets would speculate against sterlingisation in such a way as to bring about change quite rapidly and that it would descend into chaos and force some other changes within a much shorter timescale than Mr McMillan seemed to be suggesting.

Professor MacDonald: That is what I believe, coming at this from a currency aspect. All the evidence seems to suggest that if financial markets are either going to make a capital gain or a capital loss they are not going to wait until the medium term to incur that loss or gain. They are going to bring the medium term back to the present because they want that gain now. That is the whole point of the so-called speculative attack literature, where currencies are attacked because they are not able to address underlying competitiveness. I think we saw a classic example last week of Argentina, which defaulted 13 years ago on its debt because it was defending an inappropriate exchange rate, its competitiveness was changing and it has still not been back in

corporate bond markets; indeed, it has had to default again, as we have seen. It led to an economic collapse in the country with 100% inflation shortly after that default.

Q5984 Chair: Could you clarify what a speculative attack means? I have visions of Swiss gnomes with bags of swag. I am not quite sure how it actually operates.

Professor MacDonald: It can operate in a number of ways, but it is basically a recognition by the market that a country's chosen exchange rate, which here I think we have accepted would be one to one, is not appropriate. In some cases it may take some time for all these gnomes to network, but often what happens is there is a big gnome and in the UK's experience that was George Soros. He effectively co-ordinated speculators. He said, "I don't believe sterling's rate within the ERM is tenable and I am going to hit the Bank of England", and that is what he did. By doing that and saying that, by making that commitment, he co-ordinated all the gnomes, if you like, and so there was huge pressure.

Q5985 Chair: I understand that. I understand the concept of selling sterling short. What I am not clear about is how that operates in circumstances where both countries have sterling, where the UK has sterling and Scotland is sterlingised. What is it you sell short?

Dr Armstrong: When you both have the same currency, as an independent country you always have the option to introduce another currency. The issue we are talking about here is capital flight. I am not saying whether they would or not, but if people thought that this arrangement was not credible they would move their money out of one country into a different jurisdiction. That capital flight would lead to a lower and lower level of economic activity and worsening fiscal accounts until such point that people democratically decide, "This is not worth it anymore". That is essentially what happened in Argentina in the currency board collapse. They had a legal currency board that collapsed in 2001 where a number of controls and restrictions had been put in place and it basically led to riots in the streets and so on. What is interesting here is that we know from the White Paper that there is an opportunity to change currency arrangements at some point in the future. If enough pain has been imposed, will people take that opportunity? If they do, then you would be introducing a different regime in difficult circumstances and that is where you can get potential gains or losses. That is how you would do an attack then.

The other way you would do an attack with one currency is the same way as they did it in the eurozone. You do not have to have a currency to form an attack; you can do it through interest rates. All of a sudden the governments of these countries could not issue bonds or raise finance at a reasonable price and so the attack mutates into an interest rate issue when, because your economic activity is low so you have to issue bonds to pay for your fiscal deficits, you go to issue bonds people who say, "We don't think you can pay us back so we are going to charge you a higher interest rate". That higher interest rate becomes that, "My fiscal deficit is going to be worse, which means I am going to have to issue more bonds, which means I am definitely going to charge you a higher interest rate", and around it goes. That is another way the fiscal attack can happen.

So it is not the case that by just having one currency, therefore we can't have an attack. It is the flows of private citizens, both businesses and households, that will decide the durability of the exchange rate, not what any government decides to put in place.

Q5986 Chair: The attack in that way, the actions of private citizens and corporations are not necessarily designed to attack the currency. They are just people taking prudent decisions to move their money to safer jurisdictions but the effect is the same as in an attack?

Dr Armstrong: That is correct. We have seen for centuries that the nature of human beings is that they look to preserve their capital.

Professor Bell: If I can add that loans are not necessarily malign. They are just acting in their own interests. The other case with a single currency where this happened recently was the Czech and Slovak Republic example where effectively it was capital flight that caused the eventual breakup of the currency there.

Owen Kelly: I thought it would be useful to quote from the UBS global research on this and they say, “Events in every monetary union breakup of the 20th century have shown that bank depositors pre-empt any political negotiations and withdraw money, leading to the incentive to reduce credit creation and to raise interest rates for domiciled businesses”. I think their view is that all of this is driven, as others are rightly saying, by customer sentiment and people’s actions rather than theories about currency unions or other things.

Chair: I think we have covered sterlingisation fairly thoroughly but possibly we will come back to it if other questions occur to us. Maybe I could turn now to Graeme to pick up issues relating to the euro.

Q5987 Graeme Morrice: I have got these visions of gnomes going about the place, along with the angels singing outside. We have established that a formal currency union post independence is not a realistic option and neither is sterlingisation or else Scotland in an independent scenario would probably be an economic basket case. Of course, there is nothing in the White Paper to suggest that the Scottish Government have given a plan B any serious consideration, although we know that there are some people in the “yes” camp who do take the view there should be a separate, distinct currency post independence. In terms of the euro, we obviously are aware that the ambition of an independent Scotland would be to join the European Union and it certainly would have to give a commitment, at least in the long term, to join the euro. We are aware that there are implications if Scotland was to go down that path. I think initially Professor Bell suggested that it is an idea that has probably already been written off. I wanted to explore whether you thought that an independent Scotland being in the eurozone would be a good thing for Scotland. Iain, would you like to kick off?

Iain McMillan: Thank you very much. I think the first thing is that were Scotland to make a bid to join the euro then presumably it would have to be a member of the European Union first. Again, our members have seen considerable difficulties arising because the UK Government, with some academic support and the public statements of the President of the European Council and the President of the European Commission, has said that an independent Scotland would be a new state outside the treaties. The rest of the UK would be the continuing state with the treaties still applying, and therefore an independent Scotland would need to apply and go through the negotiation process. If eventually it was admitted to the European Union by all 28 member states, the conditions of membership could be different. Of course, that is controversial because the Scottish Government say that that would not happen, and they have some academic support to suggest that Scotland’s passage into the EU or continuing in the EU would be more straightforward, albeit with some conditions that may differ from those that exist at the moment. So the first complexity in all of this is that it could take time for Scotland to take or in some way maintain its place in the EU with the euro coming sometime after that. What happens in the

intervening period after secession? What currency would be used? What arrangements would be put in place there? For our members, that is a matter of concern.

But even with the euro, we have seen what happens in a currency zone where political union and fiscal union are absent and Dr Armstrong described the attack on some of the countries through fiscal levers and so on. But there is also the question of long-term trading arrangements because Scotland's entry to the euro would mean that it would be using a different currency from that in the rest of the UK. The rest of the UK is our closest neighbour, it is our largest trading partner with nearly 70% of our exports going to the rest of the UK, and entry into the eurozone would introduce two things: exchange rate differences and therefore costs around that, and it would also introduce costs of exchange so that there is a cost to pay for the companies buying sterling by trading their euros. There is also a spread and so on. Again, not only are there uncertainties around all of this but there is actually scope for an increase in the cost of doing business across that international border, as it would become, and compounded by a different currency.

Q5988 Graeme Morrice: That is interesting. Is this the kind of thing that your members are saying to you, that if we ended up in that kind of scenario there would be a serious concern because of the barriers in terms of trading, with regards to south of the border an increased cost when it comes to the whole issue of exchange rates?

Iain McMillan: That is correct. That is the concern and also all the short to medium-term uncertainty that surrounds that as we go forward in the event of a yes vote.

Q5989 Graeme Morrice: If we could look at the implications for Scotland post independence being part of the euro and the implications for Scotland's fiscal policy, and maybe describe what sort of scenario we would see in a situation like that; would that be advantageous to an independent Scotland or disadvantageous? Does anybody want to pick up on that point?

Dr Armstrong: We know that in the past there were the stability and growth pacts, that I think it is fair to say spectacularly failed because of the bigger countries, and they have been replaced by what is being called the fiscal compact that, because there is not political union between all of these countries, they are doing in a slightly backdoor way by saying, "In this fiscal compact you have to legislate to have balanced budgets". There is some wiggle room for when you have difficult periods, so it is not all periods. If an independent Scotland were to join the euro then it would also be signing into these fiscal constraints, which may be perfectly sensible but there would be fiscal constraints they would be signing into.

Q5990 Graeme Morrice: Presumably there would be an impact on the cost of borrowing as well, probably in the wrong direction.

Dr Armstrong: If they had joined the euro then they would be using the euro. The interest rates, as we know, are not identical in each country in the eurozone—it would be very nice if they were but they are not—and the interest rates will depend on the position that Scotland would take, the debt it would inherit, its productivity, its economic policies; a number of things. It would depend on what Scotland would look like within the euro. I have to say that I am less sceptical than some on an independent Scotland using the euro. There would be a number of advantages to it as well. Scotland has a big financial sector, as we have talked about. They would be able to

spread some of those risks within the euro community, so there are advantages as well. It would have a say on the ECB Council; it would have a say over monetary policy. Okay, it would be one of 20 voices but it would be a voice.

I think it is too easy to dismiss it because of its last eight years of troubles. It is too easy to dismiss it out of hand without considering what the pros and cons are here. Transitional arrangements, absolutely; currency volatility vis-à-vis your biggest country, completely agree. I think currency volatility vis-à-vis your biggest country did not cause a disaster for those European countries that have not joined the euro; it did not cause their exports to collapse. I am not quite as worried as some.

Professor MacDonald: It goes back, I am afraid, to the oil effect, the petro effect. That is still there whether you join the euro or not. The reason that Norway has not joined the euro is because of the oil effect and an independent Scotland would have a similar amount of oil, if it got a geographic share, to the Norwegian case both in terms of its trade and as a proportion of GDP. All of the existing EU members are non-oil producers so you would have this important asymmetric competitiveness effect. How do you deal with that? You may not just have a budget to balance but you may have to have a budgetary surplus over a number of years. I think it suffers from the same problems that any fixed rate regime suffers for an independent Scotland.

Q5991 Chair: When you say asymmetric competitive effect, what is that in real words that ordinary people would understand?

Professor MacDonald: If you have an increase in the price of oil, say a dramatic increase as we have seen at times when there has been war in the Middle East or whatever, there is a big spike in the price of oil. A producer of oil gets a huge hit in their inflation, loosely speaking. Their inflation rate goes up but the converse should be happening in countries that are oil importers, by and large.

Q5992 Chair: What is then the effect of that on industry in Scotland and on real people?

Professor MacDonald: That then has knock-on effects to your non-oil sector. This is the crucial thing. Scotland, and of course the euro area, has a well-diversified non-oil sector, so if you are what we call the real exchange rate or your competitiveness is moving around a lot with oil prices, as it would be in Scotland, that has knock-on effects for your non-oil sector. If you imagine the price goes up in the oil sector, therefore the basic mechanism is that wages will go up, material inputs will be driven up in that sector, and there are channels that push that into the non-oil sector and so it becomes uncompetitive and you essentially see the non-oil sector being squeezed out. That is a very real issue in Scotland because the non-oil trade position is one of a very significant deficit and so that would make that situation worse. If it is not addressed by means of flexibility in your exchange rate you will ultimately get to a situation where you won't have much of a non-oil sector because it will have been crowded out, as we say, by the oil sector.

Q5993 Graeme Morrice: What would be the situation if Scotland applied to join the EU or was in the EU and, as we said earlier, has to give that long-term commitment to join the euro, and the point that Mike Crockart raised earlier that the SNP have said that if they are not going to have a formal currency union with the rest of the UK post independence, it is going to renege on accepting its fair share of the national debt? If that was the case then surely an independent Scotland would be seen as a greater risk to the international moneylenders and, therefore, I assume that would impact

negatively on borrowing. In terms of negotiations to join the euro, at the end of the day would the powers that be not see that greater risk scenario being a problem for an independent Scotland ultimately joining the euro? I think Owen wants to come in on that point.

Owen Kelly: You are moving to a general point about the process of joining the EU and the relationship between that process and the eurozone. I think it is pretty much a basic requirement for joining the EU that international disputes or disagreements with other member states in general are sorted out beforehand. I say this not on the basis of particularly talking to either side of the debate here but trying to talk to other decision-makers in this process, in other member states and in institutions in Brussels. I think that is a really basic requirement. The timing of all of this matters. If you are continuing to have some kind of dispute about the debt or something like that, that will be a problem and it will also make it more difficult for the rest of the UK to play the leading role that it will need to play in securing Scotland's accession process or negotiation process, depending on what you think about how that process will be followed.

On the financial services industry in particular, if you were in the eurozone you would also be joining the sort of caravan that is currently moving, a bit sporadically but nonetheless is a big and important caravan, towards European banking union. It would have implications for the banking industry for sure and the financial services industry in general. There is a lot of talk at the moment about the banking union going further. ECB board members have given speeches about European capital markets and other things. So it would also have an impact, assuming the rest of the UK remains with an opt-out as it obviously will; there is no suggestion that the rest of the UK would join the euro. It would be quite a fundamental change in the nature of the regulatory unit within which the Scottish industry sat.

Graeme Morrice: Does anybody else want to pick up on that point?

Dr Armstrong: Yes. On your point about EU entry, to shortcut long stories, it is going to be a political negotiation in terms of entry. However, a political negotiation is predicated on the fact that the UK is supporting it. Taking the scenario that Mike painted that we are not taking a fair share of our debt, that debt does not disappear. The rest of the UK then have a bigger debt burden per person and one would have to think whether that would be okay with the rest of the UK, which presumably would be part of the negotiations. I assume there are other countries in Europe that would also like to walk away from their fair share of the debt as well. There is a lot of debt around these days. I think it would be brave to assume this would have no impact at all on those political discussions, but they are political discussions and we have not been in this situation before so it is hypothesising really.

Q5994 Chair: I think we have covered a lot of stuff relating to Scotland's entry into the EU in other events and it is helpful to have it touched on here to make the point that all these things are interrelated. Can I pick up one point relating to the previous discussions that we had about sterlingisation and its potential collapse? Is it possible to foresee or likely to foresee a situation where sterlingisation is tried and collapses and a flight into the euro is then a logical path to take, or in these circumstances is it even less credible to go for the euro than you would if you were starting from scratch?

Professor MacDonald: I would say it is less credible because of the oil effect. If it was not for the oil effect then I think things would be very different, but because of the oil effect I think the only feasible option for an independent Scotland would be to have a separate currency, which raises a number of other issues. I do not see the collapse of sterling then try the eurozone as being

successful, for the reasons I gave earlier that you are going to really hit your non-oil export sector unless you can build up very significant fiscal surpluses.

Chair: Is that a general view?

Professor Bell: Maybe I am less optimistic about the longevity of the oil industry than Ronnie is. We are in a situation where the amount of oil production has been falling very consistently over the years. There is still a lot out there but it is becoming increasingly costly to get it out. There is a question of balance here: how much will oil be affecting Scottish competitiveness 10, 15 years from now?

Q5995 Chair: Could I clarify that? The issues that would be faced by Scotland are not 10, 15 years from now, so the oil effect that Professor MacDonald was referring to would be impacting on the decisions that were taken pretty much in the short term. Unless I am mistaken, the consensus was that sterlingisation would not last that long and therefore a separate Scotland would be in the position of having to make a choice about what to do, possibly joining the euro, in a relatively short period and oil would not come into it.

Professor Bell: I think it would not have an immediate option to join the euro. It depends what length of time we are talking about. If we are talking a matter of months in relation to sterlingisation there is no option but to go for your own currency, it seems to me, and then at some subsequent time in the future, which probably would be the long-term future, think about other options.

Iain McMillan: I was going to add that I share David Bell's view that the euro may not be an option in early days because there would be conditions attached to an independent Scotland's entry there. It would be a very difficult situation because, from what we have heard today, the conditions that need to exist to support a sterlingisation are absent in terms of the state of the annual public finances in Scotland. The reserves and the ability to build reserves to support such a regime just are not there. I can't help you today with what would be the least worst alternative. We have not looked at this in detail in the CBI; we don't have a member mandate. We haven't ranked each of these options as least desirable but they all are undesirable.

Dr Armstrong: I just want to clarify our position here. There is a process to join the euro. I said joining the European Union is a political negotiation, but to join the euro is a different thing. You can be a member of the European Union and not be part of the euro; that is what the UK has. To join the euro you have to enter what is called ERM II, first of all, which requires you to keep your currency stable for two years. You have this difficult intermediate period where the rules suggest—and every country that has gone into the euro has had to do this—you would have your own currency, because you could not guarantee you could keep sterling stable. That would depend on this other country called the rest of the UK. You would have this awkward intermediate period where you would have to have your own currency if you are to stick by that process.

Can I also say that the world economy may go on to a massive boom for the next 10 years? None of us actually knows, has a crystal ball on any of these things. All we can look at is the risks and exposures that are being created without saying exactly what—the world economy might be absolutely booming like we have never seen it before in the next 10 years. I think that the portrayal, speaking for myself, that this would necessarily lead to a collapse in all circumstances is

not what I am trying to say. What I am trying to say is that there are serious risks around this exchange rate regime.

Q5996 Mike Crockart: We have dealt with plan A, which was monetary union, as having been ruled out by the rest of the UK, but if plan B was sterlingisation, we have pretty much said that that would collapse pretty quickly. Plan C, which is the euro, is not a short-term option and there are difficulties around the process of how you would get there. We are left with plan D, which is the separate Scottish currency. There are many on both sides of the debate that are saying that this should have been plan A all along because it is potentially the best solution for Scotland, giving control over financial economic levers. Is that the situation? Is a separate Scottish currency best for an independent Scotland?

Iain McMillan: As I say, we have not ranked these in terms of least worst, but I think we need to look at what characteristics a separate Scottish currency would have. As you rightly say, Mike, the currency, if it was floating, could move around in a way that takes economic shocks and strains that would not be able to happen if it were tied to another currency, but then it introduces other problems. For example, I mentioned that the entry to the euro would cause exchange rate costs and risks between Scotland and the rest of the United Kingdom, Scotland's largest trading partner. The problem with Scotland having its own currency is that it would introduce these costs and risks to every other country in the world, including the European Union and the eurozone. Again, that is not a good option for our members. Costs would be introduced to their operations and doing business that do not exist at the moment. When you compound that with, over time, the different regulation that Owen has talked about, different laws, rules, taxes and so on. The fear of our members is that the barriers to doing business across the United Kingdom—and into other jurisdictions—go up or is not stable, and so again on that particular one it is not an attractive option for our members.

Q5997 Mike Crockart: I am interested that you are trying to identify the least worst option because the arguments that we heard earlier on—and Professor MacDonald was making this point—is that if you have effectively a petro currency then the dangers to the rest of the Scottish economy must be quite large and, therefore, having your own currency may be the best way of protecting yourselves from that sort of danger. Is that—

Iain McMillan: That is a very fair point and I suppose the point I am making is that we have not done detailed work in the CBI to be able to rank these other unpalatable actions into least palatable. Therefore, I do not have a member mandate to come here today and tell you, "If we cannot keep the pound sterling in a United Kingdom, then our preferred and least worst option is X". I do not have a mandate to do that but what I can explore with you are the costs, the risks and the characteristics of the options that you are looking at. I hope that is helpful.

Q5998 Mike Crockart: Yes. Professor MacDonald, you do not have a member mandate. You do not need a member mandate. What is the issue with a separate Scottish currency? Is that best for the rest of Scottish business?

Professor MacDonald: It would be in the long term, but my concern is the transition to the medium to longer term. I say that because if you go into the separate currency, which addresses the oil, the effects oil will have on your non-oil sector, it needs to be a managed currency. It needs to be what we call a managed float.

As Angus said earlier, if you were to take the share of foreign exchange reserves that an independent Scotland would be likely to get, it is between £6 billion and £7 billion. That has been

described—I think it was John Kay who so aptly described it as a “handful of loose change” for hedge funds. What that means effectively is that you could not have a fixed or managed exchange rate to start with. These reserves are not sufficient to support a fixed exchange rate, so you are going to have to have a flexible exchange rate, as Iain McMillan said. The key point about flexible exchange rates is they are very volatile. They would be especially volatile with a newly minted currency, as Scotland’s would be, where we believe it would be facing quite significant fiscal deficits. It would be facing the kind of debt issues that Angus mentioned. So I believe the currency would be very volatile and it would have deleterious effects on trade particularly obviously with the rest of the UK, our main trading partner.

Moving forward, to get to a position where you could have a managed currency that would address the issues that you are going to have to face in an independent Scotland, namely this petro currency issue, you are going to have to do what was argued earlier. I would think you are going to have to build up significant foreign exchange reserves following the example of Hong Kong. To do that you are going to have to run fiscal surpluses. There is no question about that. The figure we are running with at the moment for an independent Scotland in 2016 is between 5% and 7% for the fiscal deficit. So, if you are going to your own currency and you are going to move towards managing that currency properly, you are going to have to turn that deficit round and move it into a surplus to accumulate foreign exchange reserves. Clearly that is going to be a very, very painful process. That essentially is what you are going to have to do. There is no other alternative option for currency other than to have your own currency, given the oil effect, but if you do that then you are going to have this quite long protracted period of austerity I believe.

Q5999 Mike Crockart: Could you or another member of the panel explain why there is a difficulty at start-up of a new currency in pegging it to sterling or the euro or the dollar or any other currency you wanted to choose?

Professor MacDonald: That is effectively to say you are going to fix the exchange rate, and to fix the exchange rate you have to give an unlimited commitment to the markets, that you are going to defend the rate you have chosen. That is the commitment. To give an unlimited commitment you have to have massive foreign exchange reserves.

Q6000 Mike Crockart: Because you would have to be buying the foreign exchange to defend your position?

Professor MacDonald: Yes. The only way—and this is a point I did not make but I think it is an important one—that you could attenuate the volatility in the short term, until you built up your foreign exchange reserves, would be by putting up your interest rate relative to your trading partners. So interest rates would be higher than your trading partners with all the repercussions that would have for loans and mortgages and so on in the economy.

Q6001 Mike Crockart: In order to attract capital into the country?

Professor MacDonald: Essentially. You have to stabilise the currency and one of the key ways you can do that is through interest rates. That is one of the main drivers of exchange rates.

Chair: Lindsay, do you want to come in on that particular point?

Q6002 Lindsay Roy: Yes. Realistically, how long would it take to establish a new currency and a central bank? What would happen in the interim?

Professor MacDonald: Is that something you have looked at, the timeframe?

Dr Armstrong: Realistically, I think it could be done in three to four years. People have done this before but they have never done it with—the difficulty is the sophistication of the financial institutions. So what would be required is a whole new set of institutions for an independent Scotland. That is doable, people have done this before. That is perfectly reasonable. That is fine. The difficulty is to re-denominate the contracts. So your mortgage—assuming you have one—at the moment is in sterling. I am not sure whether it is under Scottish or English law. It depends where you have it and so on and so forth. Since you are going to introduce a new currency you will have to re-denominate the contracts. Again that is a process that has been done. People have introduced their own currency. It is just here you have very big financial institutions where you are going to have to look at their balance sheets as well and look at what re-denomination will mean for them. That is the difficulty in the transition arrangement that you have a lot of institutional issues and re-denomination costs, which obviously brings in genuine uncertainty because we have not been down this path before.

Then you have the economic adjustment, which—as Ron has been saying—in order to allow people, Scottish citizens and foreign investors, to believe that this exchange rate can be maintained then you have to have confidence that Scotland is going to be able to have a robust balance of payments, and one thing a robust balance of payments requires is strong fiscal accounts. You need to have a credible Government using credible fiscal policy, and perhaps the beginning is going to have to be particularly cautious. I agree entirely with Ronnie and David that at the beginning you would need to run substantial fiscal surpluses for quite a number of years in order to build up those reserves for the rainy day, to be able to defend yourself and to be credible with your own citizens that actually there are enough reserves to pay for things like deposit insurance. So you have the economic adjustment; you have the institutional requirements and you have the legal issues such as re-denomination. Those first two, the re-denomination and the institutions, my guess is you could do it between two and four years. It would be difficult but it has been done before.

Q6003 Lindsay Roy: Four years would be two years into independence. What would happen in the interim?

Dr Armstrong: This is where we get into the issue of: it will be in the rest of the UK's interests to make this as smooth an adjustment as possible. If the people of Scotland decide they want to have independence and they want to have their own currency, and there is a reasonable division of assets and liabilities, then that is entirely their own right and why would the UK not be as co-operative as possible in trying to bring that about by as stable and secure a means as possible? It would be in the rest of the UK's interests.

Q6004 Chair: Could I just clarify that? That could not be done, though, within the 18 months' timetable that the Scottish Government has set for independence.

Dr Armstrong: Given where we are starting from today, to do all of those changes in that timetable I think would be difficult. To bring about all those changes of introducing your own

currency, to do all the re-denomination and create the institutional framework, I think would be difficult in that timeframe.

Q6005 Chair: So that is a bluff then; that is a combination of bluff and bluster, isn't it?

Dr Armstrong: It is an issue of what aspects could be taken over between two independent countries and still worked on, still parts of the process. Some functions can be shared, for example, over an interim time period. There would be ways of working this through. It is difficult but it is certainly possible and it has been done before. I think it would be erroneous to say that this is just not possible. It is possible. There are clearly risks. This would be a very big job but it is possible.

Q6006 Lindsay Roy: Yes, it is in their interests. What would be the interim arrangements in terms of moving from a currency union to a separate currency? Would it be sterlingisation?

Dr Armstrong: There is a presumption there that there has to be an interim arrangement. There would have to be an agreement for how you do the re-denomination. The institutional arrangements can be shared for a period of time. Neighbours can share things. There are enough skilled people in the Bank of England, debt management officers and so on. That is possible. The—

Q6007 Lindsay Roy: When you say “share things”, like what?

Dr Armstrong: You would need to build up a number of institutions. You would have to have a debt management office. You would have to have a central bank. You would have to have a tax collection office. You would have to have your own Treasury. You would presumably have to have your own currency, a printing mint somewhere. Presumably that would be by a central bank, as it often is and you licence it out to somebody. That is five off the top of my head. You would have to create these institutions. Since these institutions already exist in the United Kingdom I think it would be reasonable to expect it would be in everybody's interest to be as co-operative as possible because it is completely within people's democratic right to wish to go this way, to have their own currency. That is completely reasonable, for people to co-operate to have that institutional framework. Especially what happened in Ireland there was a lot of co-operation, despite the very much more difficult circumstances that they were going through with the creation of the Irish Free State and the obvious political tensions that were there at the time. I think those institutional arrangements could be co-operative.

We are digging into the issue here of Scotland creating its own currency, and I agree with Ronnie when he said that over the longer term this is the most credible option. It is interesting that other European countries of a similar size to Scotland—Switzerland, Norway Sweden, Denmark—guess what, they have their own currencies and they do not die. It is possible. It gives you the most economic independence and what you do with that independence is responsibility of an independent country. That is what happens.

Q6008 Lindsay Roy: Yes, I am not doubting their ability to establish their own currency, what I am interested in is the transition arrangements—

Dr Armstrong: Yes. No, I understand. Transition arrangements are extremely difficult because the legal one is a difficult one.

Lindsay Roy: —and not in any other comments over that three or four year period.

Q6009 Chair: To be fair, the Yes side is divided on this. I think we have the Greens, the Scottish Socialists and Dennis Canavan all arguing that the logic is for a separate Scottish currency but that is not what is on offer, as I understand it. The Yes Campaign's position officially in the SNP and the Scottish Government's position is that it would be a shared currency, which I think we have identified is not on the table. Owen, you want to come in on this.

Owen Kelly: Only just on the specific point of the transition. UBS Global Research say that sterlingisation would be the transitional arrangement. They make that point that Scotland will not have time to create a new currency, whereas the currency separation as we have already discussed will be driven by customer preference.

We advised our members several months ago that in their contingency planning a new currency was probably the most likely outcome in the longer term and since then—as I have mentioned—quite a lot of the analysts within the industry at a high level have come to the same conclusion. So in many ways many of the questions we have been discussing are answered once you posit a new currency because, as Angus has just said, we kind of know how that works because it happens everywhere.

I want to add briefly to the list of institutions that Angus was mentioning that would be required. I understand that if you have a new currency you also need to introduce new clearing and payment systems. In banking I think that is a big deal and that does take quite a long time. I do not know how long, but I think it is a really, really big undertaking.

Finally, perhaps going back to the discussion we had earlier on on mortgages, one of our members has done quite a lot of work on what happens when you introduce a new currency and then you separate the value of the loan, if it is an existing mortgage loan it is almost certainly denominated in sterling and it might be written into the contract if there is a currency bit of the contract. But then obviously the value of your property would then be denominated in the standard security as in the new currency. So you would have to manage the transition of that process. Now my understanding, which is very limited, is when this happened in Eastern Europe recently, where people have been borrowing in euro and then the forint, for example, went downhill. I think the Government intervened and somehow moved to re-denominate mortgages. So either you leave individuals to have that risk of the value of their property being separated from the value of their loan or you intervene—as I guess one could contemplate—to transfer that currency risk to the banks en masse. That is something that presumably one would have to look at in the process of introducing a new currency.

Q6010 Chair If I can clarify a couple of points about the moving from here to there. I think we have already come out and indicated that in our view a separate currency for a separate Scotland was the least undesirable of the options. What I am not clear about is whether or not—given that the Scottish Government have said that they want to be independent in 18 months—it is possible to combine that with a longer period before the separate currency is set up where you have perhaps a shared currency with a currency union for a period, on the understanding that that then means that the Scottish Government cannot take a whole number of decisions until such time as its own

currency is established. Is that feasible as an alternative to leaving the United Kingdom, sterlingisation and then a separate currency, or is there another choice about how this can be done, or does the 18 months have to be abandoned? It seems to me there are a number of things being suggested here that are mutually incompatible, and I am not clear which is the least bad in a sense to give up. Yes or no?

Professor MacDonald: I think that this 18 month period is far too short. I am not aware of any country or any two countries or any two units of the sophistication of Scotland and the rest of the UK, in terms of their financial integration, their trade integration, separating in the way that is being proposed by the Scottish Government. There is no precedent for this, and I think it would take much, much longer than 18 months just for the physical institutions to be put into place. I would think that a clean break in terms of currency would be the best way, in the sense that any arrangement that if you become independent and then you foist on the country a currency arrangement that is not appropriate, because of all the effects we have mentioned earlier, then how is that sustainable? I cannot see it being sustainable unless you are going to have a commitment from, say, the Bank of England to underwrite this transitory currency arrangement. I cannot see our UK taxpayers being too happy about doing that. I would think you would have to have a longer transition in terms of the 18-month period to set the whole thing up, but then on day one of independence you do move to the separate currency, but when you do that you then have another transition—which is the one we were talking about—the economic transition, which is one in which you have to have higher interest rates and probably an austerity programme to build up foreign exchange reserves.

Q6011 Chair: That would then mean that the Scottish Government would have to decide that it was willing to extend the 18 months. If there is a Yes vote and the Scottish Government has gone into that referendum saying, “We will be independent in 18 months” it is not then for the rest of the UK to say “No”. The Scottish Government would have to decide that they were going to break their pledge, essentially, and say that we would remain part of the United Kingdom until such time as all these other institutions were established. Is that a reasonable summation? In terms of what we call for, is it appropriate for us to be saying that the Scottish Government have to clarify whether or not they have to stick to their 18 months, or whether or not they are willing to extend it, in order that these other institutions can be established to allow potentially the establishment of a separate currency?

Professor MacDonald: I would strongly say, yes, they would have to extend that period for the reasons that we have all been discussing. I think there would be so much uncertainty in that period, which would be so incredibly damaging to the Scottish economy—and I believe the rest of the UK—that I really do think it would need to be extended. I do not think there is any other way.

Q6012 Chair: Is that a consensus view among those of you that feel able to say anything without the danger of being monstered by either your members or the Scottish Government? Ian?

Iain McMillan: I think that the Scottish Government would need to be prepared to extend the period if they found in practice that the 18-month period just was not going to work out because the negotiations were taking longer. But again the problem is that that puts business between a rock and a hard place, because that extends the period of uncertainty from 18 months to whatever the period turns out to be. So again I come back to this: of course, the decision is a matter for the people of Scotland and we will respect that decision, but I think that the uncertainties and the potential costs involved are a matter of concern for our members.

Q6013 Chair: I am sure I speak on behalf of a whole raft of people in the political world when I say business cannot go on complaining about uncertainty, and on the other hand not actually say anything. If they have these concerns and have a view, then they ought to find it within themselves to have the courage of their conviction and say things. I notice quite commendably Babcock has come out recently and said what it believes the impact will be and agree or disagree at least they have made the position clear. Perhaps you ought to take it back to your members and, indeed, your own members as well, Mr Kelly, that they ought to be spelling out what the consequences of these various options are perhaps a bit more than they have been willing to do up to now, as well as the general decision overall.

So am I right in thinking that we have possibly identified what should be the Scottish Government's plan B in the event that a currency union is not accepted? I mean the least bad seems to be the idea of a separate currency but with an extended introduction period. Unfortunately again, nodding doesn't cut it. Somebody is going to have to say something.

Professor MacDonald: Yes, as you can imagine I would strongly vote for that, yes, definitely.

Chair: The others?

Professor Bell: I would say that this risk of re-denomination exists from day one and there is a question about how you manage, who bears the costs of that risk. In other words, everyone will be aware that there is now a possibility of a new currency existing. There are a whole set of institutions to be put in place, but that risk will have to be managed throughout this period and that is going to be an extremely tricky process to avoid the kind of capital flight issues that we have already been discussing.

What I am saying is it is not just as simple as setting up the institutions perhaps over a longer time horizon, there is this risk that has to be managed.

Q6014 Chair: Presumably that then raises one of the issues that we were going to come back to, which is the question of lender of last resort or who ultimately stands behind this whole process. Presumably the UK Government and the Bank of England, if there were circumstances where it was agreed that we were moving towards a separate currency with general goodwill and so on and so forth, that would have to be part of the package. The assumption in those circumstances would be it would have to be the Bank of England and the UK Government because there is nobody else.

Professor Bell: Yes. We have already discussed the fact that the Scottish Government would not have access to sufficient funds to back up this process. That of course then brings back into sharp focus the question of the debt, because if you are going to rely on the Bank of England and the UK Government to do stuff for you, they are going to say, "You're going to take the population share of the debt."

Q6015 Chair: Absolutely. Professor Armstrong, you have your—

Dr Armstrong: The transition arrangements are already on track. I want to pick up on something that Owen and Ronnie touched on, this idea of an in between thing where you can do a bit of sterlingisation until everything is calm and nobody notices and then do another change. If you know in the medium to longer term the best way to do this is to operate your own currency, then it is better to do that rather than go for the interim stage. The reasons are: first, temporary arrangements in financial markets—as Ronnie will tell you—become very temporary if you are

not careful. People know there is an end to this so having a temporary currency arrangement and expecting nobody to notice, no foreign investors or capital flight, not to think this might come to an end, you have already told them it is coming to an end. That was the Czech/Slovak issue. They created a temporary currency union, “Well, guess what, it is temporary I am moving my money today”.

So the first thing is this temporary issue is easy to say but it is much harder to do in practice. The next thing is if you go for this temporary sterlingisation thing, well, in doing that you are going to get rid of what is currently a Scottish currency called Scottish Notes, which you are going to have to bring back again in some point in the future. So why did you do that? You are also going to make sure everybody’s contracts are going to be written into sterling when eventually one day you are going to bring in a different currency. That is going to make it even harder. So that interim one although it is kind of kicking the can down the road and makes it look like you can just put this thing off, I think that if you would agree—and I think there probably is a consensus—that for an independent country, of the size and sophistication of Scotland, having your own currency over the medium to longer term is the right way. It gives you the most economic independence, responsibility and economic levers. It is better that that was resolved earlier rather than leaving it until later and, therefore, those institutional arrangements, as Angus quite rightly pointed out, things like re-denomination, were brought about sooner rather than trying to have some sort of clever way of doing a temporary fix over the short term.

Q6016 Chair: That cannot be done within 18 months.

Dr Armstrong: My personal view is, as I have mentioned, I think it would take two to four years to do this sort of change now. I have picked those numbers carefully but I think the reason why I did that is because under this arrangement it would be in the rest of the UK’s interests to completely—and why wouldn’t you co-operate? They did it in Ireland. It would be in everybody’s interests. Nobody wants to get these banks having a difficult time; 80% of them are owned by us or one of them anyway, RBS, is owned by us. It is in our interest to make this process function smoothly and in doing so, if people of Scotland want to have an independent—

Q6017 Chair: I understand that. What I do not quite understand is the incompatibility between that two to four year period and the 18-month period. You spoke about an interregnum, a temporary. Presumably from the date of a Yes vote to the establishment of a new currency is going to be a period of flux and potential capital flight, and gnomes potentially taking action and all the rest of it, and I am not quite clear how any of that can be managed successfully.

Dr Armstrong: The short answer is we do not know for sure that it can be managed successfully. It is a risk but you are better to have that risk managed by the Government north of the border and the Government south of the border working together to try to manage that risk. Does that risk disappear because of that? Of course not. There are still risks around it. There will be enormous risks in this transition but it would be in both sides’ interest to try to make this work and to come to a reasonable conclusion.

Q6018 Chair: What might the impact be on my constituents’ mortgages during this interregnum?

Dr Armstrong: First of all, it would depend on where those institutions were deciding to locate. What one would want, and the difficulty here is that had an independent Scotland run fiscal surpluses for a number of years, so that we know in future we will have enough reserves, blah,

blah, blah, then okay. The first thing you would like to see is a very prudent fiscal policy to give people confidence that there will be these reserves built up and sound finances and so on. Without that, I think there is a risk that some of these financial institutions will decide to change their location, simply to avoid what will be difficult decisions.

Q6019 Chair: Unless I am mistaken—translated into layman’s terms—that would mean that a Scottish Government, which had just won a referendum for independence, would be required to introduce a programme of increases in taxes and cuts in spending in order to provide a stable currency.

Dr Armstrong: In order to generate a fiscal surplus?

Chair: Yes.

Dr Armstrong: That is what they would have to do to get a fiscal surplus. You have to get a fiscal surplus. You have to get more income and spend less.

Q6020 Chair: That is the prospectus that is being offered to people at the moment.

Dr Armstrong: I cannot help on that one. I am saying that you get a fiscal surplus by getting more revenue than you do spending.

Q6021 Chair: In that context then I am seeking again to clarify the impact upon my constituents’ mortgages, and you responded that if the Scottish Government wanted to keep mortgages and other things stable then they would have to introduce a programme of cuts in expenditure and an increase in taxes, the likelihood of which and the enthusiasm for is possibly less than total. In the circumstances that that doesn’t happen what then happens to my constituents’ mortgages?

Professor MacDonald: They go through the roof.

Q6022 Chair: Right. That is helpful to have clarification. Do you agree with that, Mr Armstrong?

Dr Armstrong: I am not sure they would go through the roof. I think what would happen is, without those changes, people would start to question this, and this is before we have created this new currency, so in this tricky interim period. You would have a question mark of what would happen to the biggest mortgage lenders. Where would they be incorporated? If they were not incorporated in Scotland would they provide branch banking into Scotland, into this independent country? When they do this branch banking they are going to have to make a guess about what is going to happen to the riskiness of this country, and that is going to depend on what is going to happen to the new exchange rate. If this is done in a way generating fiscal surpluses you have to have confidence that that exchange rate can be maintained at a reasonable level. If they don’t, and the deficits remain large, then presumably they will not have so much confidence and they will build—as Ronnie said—a risk premium into this and then they would be higher.

Q6023 Chair: Presumably the rational position for any mortgage provider based in England is not to touch the Scottish market with a barge pole, on the basis that it is all risk and no guarantees.

Dr Armstrong: If you pay for this risk. So people do offer cross-border mortgages but if it is going to be in a separate currency then you have to be aware that this person is going to be taking a lot of risk on and when you give the mortgage—it is quite tough to get a mortgage these days already without thinking about, “This person might have their wages and so on paid in a different currency, is that going to be worth the same value?” So—

Q6024 Chair: That has a through the roof observation that Professor MacDonald made. Is that correct?

Dr Armstrong: I do not use terms like “through the roof”. I use terms like: this will be a risk that the lender would have to price in when thinking about the mortgage that they would offer. If you behave very credibly and run a fiscal surplus over a sustained period of time, then I think that the idea of introducing your own currency—if you have that sort of background of proven fiscal conservatism—is a possibility without all of these things happening. If you do not have that, if you are going to introduce your own currency and you continue to run big fiscal deficits and you do not have any meaningful FX reserves, then clearly there are risks and it would translate into higher interest rates.

Q6025 Chair: Owen, you want to come in on that.

Owen Kelly: Yes, very briefly on the practicalities of new currency creation and the point of doing it quickly in any kind of transition. I completely agree. All the analysts and everybody else would agree that temporary currency arrangements do not work for obvious reasons. We do have some relatively recent experience of contemplating the creation of a new currency. That was Greece when it was possibly bowing out of the Eurozone. The practicalities around that were worked through by lots of big international banks when there was a time—it has passed now—where it looked as if the drachma might be recreated in some form. Of course that is a different situation to the creation of the euro itself where there was no remaining currency; everything was becoming the euro. One of the issues with creating a currency out of sterling is that the option will be there, certainly during any transition, to stay with sterling.

In terms of the point you were making about our members not speaking out and so on, as I say, our industry has said a lot on this issue. It may not have come through statements by companies in our membership but, nonetheless, there is a lot of thinking out there. Bank of America Merrill Lynch, Kleinwort Benson, there is a who long list. They are all very clear in what they say that a currency union is not going to happen and that a new currency is the likely outcome. But to your question: would it be sensible for this Committee to say, “Look, the 18-month timescale isn’t practical”. I know I am stating the obvious but I think it is worth restating. The 18-month timetable is entirely predicated on the belief, assertion—whatever you want to call it—that there will be a currency union and I am reasonably sure that if the Committee makes that kind of call then the answer will be, “But because there will be a currency union it will be achievable within 18 months”.

So I think there is a difficulty in the obviously politically pitched statements made, on either side of the debate, and distinguishing between them and the sort of empirical rational analysis that you see through financial analysis and the kind of analysis I think you are seeing here. I am not trying to tiptoe round anything but I think the position of the Scottish Government on the 18-month timescale is predicated on a set of beliefs, and one of them is that there will be a currency union.

Q6026 Chair: Right. Thanks. If I could come back to the five points that you made that you sought clarification on. You wanted to have clarification about what currency could be used. Well, I think you do not have that. Under what terms could Scotland be a member of the EU? You haven't really got that either. What would be the effects of independence on the current single market for financial services in the UK?

Owen Kelly: We have made progress with that. We know that there would have to be a separate regulator. We know that there would be a separate tax system. I suppose that has always been obvious. Of course what happens to the market, the market has to divide effectively for jurisdictional purposes into two. There is an overlay there around the currency. If you think there would be a currency union then perhaps there would be some kind of common regulatory framework at the prudential level, but at the conduct level—that is, what should companies do day to day and how do they deal with customers?—that would have to be done separately, introducing compliance costs separately but also the need for separate services and products. You cannot sell the same pension into Ireland, for example, as you sell into the UK because they have different tax systems and different regulatory frameworks. So there would be a fragmentation of the current UK single market, for most financial services at the retail level, into two markets. We know that that is a consequence.

Q6027 Chair: So that is half a tick or is it a complete tick?

Owen Kelly: I make a general point. At the moment the Scottish Government is not in a position to tell us all that much about what would happen post independence, because obviously they do not know who will be in Government and we do not know the outcome of the negotiations that have sat behind most of the conversation this morning. But if you look at what they say on these issues, they do say there would remain a single market for financial services. I saw in the article published yesterday in the *FT* that there was reference to a common regulatory framework. I am not sure what that means, unless you say there is a currency union and there will be a common banking prudential regulation. But as I say conduct regulation I think it is now accepted on all sides—even by the Scottish Government—that there would be a separate conduct regulator. The Scottish Government continues to refer to the possibility of some sort of common regulatory structure, but I think we, and certainly everybody else, have concluded that to all intents and purposes they would be separate marketplaces for financial services.

Q6028 Chair: I think the fourth point that you had was: how long would a transition to independence take and how would the process be managed? Do you feel you have had satisfactory answers on that?

Owen Kelly: There are so many unknowns. As I say, we have made the effort to contact people who are not involved in the political debate here. As I said earlier, the 18-month timescale is predicated on a whole set of assumptions and beliefs, which I guess are genuinely held but which are not necessarily held by others who would be party to that process. Certainly the EU aspects of the transition it is clear that they would take a good while. I think it is impossible to put a date on it or a period of time. The intervention of the UK general election is clearly going to slow things down as well. Our estimate would be at the upper end of three to five years. It is all very, very vague. Nobody knows. So in answer to your question, no, we have not learnt all that much more but we have learnt, for example, that accession or the approval of all the other EU member states of whatever arrangement takes about two years.

Q6029 Chair: The fifth point was: what would be the requirements of financial regulation?

Owen Kelly: Yes. We have made some progress on that. As I say, I think it has always been clear that under EU and other international obligations you have to have your own financial regulatory frameworks. If you are looking at a new currency, which those of us not already politically committed on either side would say is in the long term, at least, the most likely outcome. You would need all the regulatory structures, obviously including central bank and everything else. If one posits a currency union you might envisage some very unusual arrangement if you could get away with negotiating it in the EU, but certainly the creation of a separate regulatory jurisdiction seems inescapable.

Q6030 Chair: Earlier on we touched on the question of lender of last resort. Are there issues related to that that people feel we have not covered?

Dr Armstrong: Only to say that the ultimate lender of last resort is always the state, unless you want to go to the IMF. It is always your own country. The central bank carries it out for you but the people who stand behind the central bank is the Government of the country.

Q6031 Chair: In the present circumstances that we are discussing, the Scottish Government would be in a weak position since it would effectively be unable to meet the financial costs of being a lender of last resort in any sort of turmoil or economic chaos, either in Scotland or across the world. Is that a fair set of assumptions?

Dr Armstrong: For Scottish incorporated banks the lender of last resort would ultimately be the Scottish Government because of the amount of debt. If Scotland takes a fair share of the debt then its capacity to do that is going to be necessarily limited.

Q6032 Chair: In those circumstances the rational thing for Scottish registered banks would be to move?

Dr Armstrong: That would be a factor persuading them to consider locating into the rest of the UK. So, lender of last resort—

Chair: Was that a yes?

Dr Armstrong: Well, first of all, I do not run any bank in fact, never mind one with two people on it, which is probably a good thing. It would be a commercial decision, but one of the serious issues would be—first of all, you have to remember that lender of last resort offers a menu of options from day-to-day transactions, which international banks from all around the world can access. So Scottish banks would be able to access day-to-day transactions, no problem, as an independent country. The tricky bit is when you get towards financial distress and you want to have emergency lending assistance, which is where for emergency lending assistance the decision, according to the memorandum of understanding between the Bank of England and the Treasury, that decision is made by the Chancellor of the Exchequer. The Chancellor of the Exchequer will make that decision presumably based on the interests of his constituents, which is the UK taxpayers. That is why ultimately when things get difficult it is the state that stands behind the central bank as the lender of last resort, and when banks decide where they are going to base themselves that will not be a small matter in their deliberation.

Q6033 Chair: To cut across that if I could, I mean in as much as I understand it, it would be rational in these circumstances for any bank to move to have a bigger umbrella over them or arm round them—or whatever metaphor you want to use—because presumably the danger for anybody in Scotland running a financial institution would be that the Scottish state would not be able to step in and support them in their hour of crisis should an hour arrive and, therefore, the sense would be just to make sure you switched. Does that not seem perfectly reasonable?

Dr Armstrong: It seems like a reasonable factor in their location. I think that where you are incorporated, so first of all where you would be regulated and where the Government would be much more prepared—because of course they do not always offer emergency assistance to all banks—or much more likely to do it is within its own border because it is taxpayers' money. Clearly that is a strong pull to be located behind a Government with strong resources. It is no surprise, when you look around the world, look at small states with big banking sectors: Hong Kong, huge reserves; Singapore, huge reserves. Whereas, Switzerland, not as big as those two but fiscally very sound. That is not an accident.

Q6034 Chair: Fine. Yes, okay, the consequences of moving. I understand the point you make about some banks, the distinction between deserving and undeserving in the event of who would be dealt out, but coming back just to clarify then am I right in thinking that there would be substantial job implications with people deciding to relocate in order to have the protection? It comes back to the point that we were touching on earlier on. The rational thing for banks to do to obtain the protection is to relocate, and the way in which the system operates means that this could not simply be just glass plating. It would mean a substantial number of jobs moving as well, the exact number of which is undetermined at the moment and we will perhaps seek further clarification on that, but that would be the direction of travel. Does that seem reasonable?

Dr Armstrong: The incorporation of the registered office for registered purposes, in the scenario we have been talking about, would move to the rest of the United Kingdom. That does not mean to say you stop doing banking in Scotland obviously.

Chair: No.

Dr Armstrong: You would then create a subsidiary or a branch to do this banking. An important question, which Mr Kelly might shed some light on, is how institutions will consider to do banking with branches rather than head offices. They are different animals. They have different legal sounding. It is not a simple case of, "I will just move the brass plate and everything will be okay, everything stays the same". It is not quite as simple as that. I am no banking industry expert. All I am saying is your lender of last resort is always your Government and where you are registered or incorporated—the same term—according to Companies House will determine which is the institution that does the regulations. If one has deep pockets and can print its own money, then that clearly has an advantage against one that doesn't.

Q6035 Chair: David?

Professor Bell: I am not absolutely sure about this but it seems to me that the employment issue is a difficult one to pin down. We do have lots of institutions working in the financial sector in Scotland who are not brass plated in Scotland, but on the other hand my understanding—and I could be wrong—is that one of the key points will be that where the brass plate is is where the

liability for corporation tax resides, and that would be very important for the Scottish public finances.

Q6036 Chair: Right, thank you. Owen?

Owen Kelly: Very briefly following up, I think in general terms if one is asking if there is a Yes vote and Scotland becomes an independent country how would large either banks or others, insurers, how would they view it as a market. I think the decision on whether to branch into the market or to have a subsidiary is hard to generalise. It depends on the nature of the business, it depends on the volume of the business and other things. It also depends on whether it is a business that requires or has, as an important part of the regulatory improvement, capital adequacy in other things because then different regulatory requirements come in. Of course, we can make some assumptions about the regulatory requirements of an independent Scotland as a separate jurisdiction on the basis that they will be complying with EU frameworks and other things, but nonetheless there is quite a lot of scope within jurisdictions to decide those things. There was recently controversy in the UK about whether a Chinese bank should be allowed to be a branch or a subsidiary, for example, so there are issues there.

In general terms, I think some in our industry have indeed made it clear that if there was a Yes vote they would examine Scotland as a market and they would then reach a decision on whether and how they should service that market. I think that point has clearly been made by a number of companies. So it is still a lot to generalise but I think it will be very much driven by the size of the market. I think it is reasonable to make a comparison again with Ireland. We have a number of members who operate on the basis of a UK and Ireland business unit. They look at Ireland as a market. They look at the opportunities there and they look at the costs, and then they decide how they will be active in that market. In that case, they have to comply separately with Irish requirements not only on regulation of conduct and other things but also capital adequacy and other things.

So I come back to my point about the difference between serving one jurisdiction and the difference between serving a number of jurisdictions.

Chair: Lindsay, you want to come in.

Q6037 Lindsay Roy: Yes, just to go back a bit. In essence, what you are saying is if Scotland had been independent in 2008 we would not have an RBS.

Dr Armstrong: I suppose that is directed to me. Well, you would have to give me more information. So if people had known in 2000 that Scotland was about to be independent in 2008 then presumably RBS would never have been the size or made some of the decisions by taking over ABN Amro in 2007. Presumably, the Scots would have been much wiser not to have made those daft decisions. So it is kind of hypothetical. If you said you had an institution the size and the weakness of RBS in 2008, and then Scotland was an independent country, then clearly it would not have been able to stand behind it. What would have happened is then the—well we are now serious in the role of imagination but presumably in that circumstance it would have involved a number of other countries perhaps. We have an example, it is called Ireland. They had a very large financial system that got into very serious financial trouble that they could not afford to support.

Q6038 Lindsay Roy: Owen, do you think that what we got at that time was a lighter touch regulation, if you recall?

Chair: The witness shrugs. It seems a reasonable way of submitting that. Owen, do you want to add anything?

Owen Kelly: Not really, no. I think that is right.

Professor MacDonald: I would like to add the point about competitiveness and to try to get at the question you are asking about whether firms would move. I think it is important to remember—and this is not often brought out if at all in the debate—that even if we were able to achieve a formal sterling zone post independence, and remove all of the uncertainty surrounding that, still at the heart of that you would have the oil issue. You would have important changes in competitiveness because of that. Basically, irrespective therefore of the regime that you have, you are always going to have this tension and competitiveness and my prediction would be that any company, be it a financial institution or a non-financial institution, the proportion of trade it does with the rest of the UK, I believe that it will move that proportion of its business at least to the rest of the UK because of these competitiveness changes. You want to internalise these changes. You do not want oil to be affecting your business costs in Scotland, as it would if Scotland became independent. So I believe that in itself would indicate that it would be rational for firms to move at least a proportion of their trade with RUK to RUK to internalise that effect.

Q6039 Chair: If I can put one final point to you. This has hardly been an occasion for lightness and joy, has it? It has been all rather gloomy in terms of the prospect. How would you respond to somebody that says, “Look, all you are doing is just talking Scotland down” and a bit like the shipbuilding industry that, “We are so good that people will give us money and orders and everything will be fine. You’re just looking on the gloomy side. All this is just unadulterated negativism and scaremongering and everything will be fine”. How do you respond to that argument, because presumably that is an argument that is going to be put?

Professor MacDonald: If I can say something outspoken as I have said before, I believe that at the moment the Scottish public are being deceived—I have used the word “duped”—by telling them they can have a currency arrangement that no economist that I am aware of who has studied currency arrangements would propose. That is a fact. Therefore, it is not talking Scotland down, it is basically wanting what would be best for Scotland if Scotland were to become independent. It is very clear from all of the economic evidence that a currency union is not the way to go. I do not think that it talking Scotland down, I think that is being realistic and being honest.

Owen Kelly: I think it is important for every country to be able to be clear eyed and realistic about things. I think it is dangerous to be too Pollyanna on any subject actually. It is in the nature of our industry to try to be dispassionate and to look at numbers. Often people criticise us for that, for being unimaginative or lacking in poetic imagination or whatever it might be. But I come back to all the analysis that has been published by our industry. It is very clear that a currency union is not going to happen. It is very clear that joining the EU for an independent Scotland will not be straightforward. Some go further, there is some very colourful language in some of this stuff and they are very clear as well about the impacts on credit rating and other things. Trying to distinguish between the things that might be said by a body like SFE, in terms of representing its members in what is a pretty uncomfortable political process, and the cold eyed analysis of large

financial institutions who do this stuff all the time for markets all around the world. They will be doing the same thing for the impacts on—I do not know—the Russian economy of the Ukraine crisis or whatever it might be and I think I tend to look to those sources for guidance, rather than those that are clearly on either side of an attempt to win a particular referendum outcome.

Iain McMillan: I think the debate, Chairman, needs to be carried out in a rational way with the analysis of the various factors, being carried out in committees such as this and you have heard from experts here. I think that is what is important, so that the public out there have a good set of evidence from which they can form their own judgments. If there are those businesses and elsewhere who have genuine concerns about the currency, about Europe, about the costs of operating across two jurisdictions, are very genuine then I do not think that that is talking Scotland down. I think that is expressing very real concerns into the debate but, at the end of the day, it is for the people of Scotland to make up their mind by weighing the evidence that they have heard.

Chair: Either of—

Professor Bell: Yes. Just before I came in I was looking at the statue of Adam Smith across the street here, one of Scotland's greatest economists. But I would go to possibly a more famous other one, David Hume, one of whose great insights was, "Let's look at the evidence". That seems obvious now but, at the time when kings thought that they ruled by divine right and there were huge religious influences on the way that people thought, perhaps it was quite an insight. It seems to me that we have tried as far as we can to look at the evidence, and the evidence is based on the history of our own country and other countries around the world. That is not to say there is not a chance that the Scottish economy post independence would be radically different and perhaps much more productive. I think the evidence on that sort of thing is that reorientation of an economy—such as Ireland, for example—takes a very long time and there is a lot of political and economic difficulty along the way. I am not trying to talk Scotland down on this at all but, as far as I can see, what we have been doing is looking at the evidence and trying to draw as clear a conclusion as we can from that evidence.

Q6040 Chair: Angus?

Dr Armstrong: I would imagine that the independence debate a lot of things other than economics matter to people. We are looking at one part of the economics debate, which is the currency options. I think pointing out that one currency option looks inferior to another one, that is having some sort of informal currency union does not look as good as having your own currency as a way of achieving the outcome you want. Personally, I think that is my professional responsibility to point that out and that is all that we seek to do.

In terms of other people's views, while there have been surveys of international economists—I think there was one published last month by the Centre for Macroeconomics, which is available on the website and people can see what they think about the broader economic and the currency context—there are other people's views. I think most of the economists in that survey or at least half of them are non-UK nationals. So you can see an international perspective on this as well from the Centre for Macroeconomics. My only angle is to look at the currency and debt issues and on those alone. That is the only issue that I am giving evidence here.

Q6041 Chair: Colleagues, are there any other observations that you wish to make? Any answers not given or questions that we have not covered? I think we have learned that Adam Smith and David Hume are both No voters and Pollyanna is a Yes vote and that has been valuable. But any final point that you want to make to us? If there is anything that you think of on the way home that you wish that you had said, perhaps you could let us have something in writing. You have been denounced in the *Financial Times* today as an unbalanced panel. I am not quite sure what that means since you seem to have been reasonably balanced to me.

Graeme Morrice: Yes, they seemed quite normal to me.

Chair: Not in the sense of deranged—well, possibly. I do not know what was meant by the writers of the *Financial Times*, but thank you very much—

Lindsay Roy: It would be fair to say that we have not been engaging in project fear but project reality and the focus and evidence has been very helpful.

Chair: I think this has been very helpful for us today. We hope to have this out-streamed some time tomorrow, so hopefully a wider audience will be aware of the discussions we have had and the points we have made. Thank you very much for coming.