



Treasury Committee

Oral evidence: The Governor of the Bank of England's speech: The economics of currency unions, Edinburgh, 29 January 2014, HC 1146

Tuesday 11 March 2014

Ordered by the House of Commons to be published on 11 March

[Watch the meeting](#)

Members present: Mr Andrew Tyrie (Chair), Mark Garnier, Stewart Hosie, Andrea Leadsom, Mr Andrew Love, John Mann, Mr Pat McFadden, Mr George Mudie, Mr Brooks Newmark, Jesse Norman, Teresa Pearce, Mr David Ruffley, John Thurso

Questions 1-69

Witness: **Dr Mark Carney**, Governor of the Bank of England, gave evidence

Q1 Thank you very much for being here again for this second session. We are already running a bit behind schedule. Why don't I go straight to Stewart Hosie since he holds, I think, a different view to that of the other three parties around the table? Why don't you have the floor for a bit, Stewart?

Stewart Hosie: Thank you, Chairman. I intend to concentrate almost exclusively on the speech you made in Edinburgh, Governor. In that speech, you listed the benefits of currency unions—that they can promote investment by reducing uncertainty, reduce borrowing costs, eliminate barriers—but you said the success of a currency area hinges on the features of its stability arrangements. You described those features as promoting the alignment of economic cycles and the maintenance of price and financial stability in the currency union. Can you describe how the alignment of cycles and the maintenance of price and financial stability can be promoted in order to deliver the benefits of the currency unions that you described?

Dr Carney: Certainly. The first element reflects to all aspects of integration between the constituent members of a currency union, free movement of labour across the border, obviously free movement of goods, and capital. Any element that detracts from those movements creates the prospect of some misalignment in terms of economic cycles.

The second element, which one sees frequently in currency unions, is some element of fiscal arrangements that smooth fluctuations across parts of the currency union. I referenced in the speech looking at federations that central fiscal arrangements tend to be on the order of about 25% of GDP, which provides some of those stabilisers there.

I will make two other points. The third issue is that obviously the underlying structures of the economy determine the extent to which there is alignment and if there are differences in the underlying structure, which brings me to my fourth point. As I reference in the speech, what one finds is that there is a reasonable range of disparity in economies that are members of successful currency unions. There is a table provided, which does a summary calculation of those disparities, but the table I provide in the speech would have Canada at the far end of the spectrum in terms of relatively large differences in the underlying industrial structure and Scotland—if one includes oil and gas on a geographic basis—closer to the Canadian end of the spectrum but not as different from the rest of the UK.

Q2 Stewart Hosie: That is extremely helpful. I will come back to the underlying structure issue, similarity or difference, and the disparity issue later. In terms of the fiscal arrangements, you talked in your speech about “some ceding of national sovereignty” for a currency union to work. That could equally be described, though—and you did in your speech—as pooling sovereignty, a sharing of risks or pooling of resources. Can I confirm that the sharing of sovereignty, the sharing of risks or the pooling of resources is precisely what is implied by having a stability arrangement sufficiently robust for a currency union to deliver all of its potential benefits?

Dr Carney: It may be the short answer. The issue that I was trying to get across that needs to be addressed in the formation of a currency union relates to the pooling of sovereignty around the so-called banking union—I am sure you will come to it—but, and this goes to the question of some ceding of national sovereignty, related to fiscal arrangements, and whether it is viable to have a currency union in the fullness of time that is only based on fiscal rules as opposed to some cross-border fiscal flows.

Q3 Stewart Hosie: In terms of the rules, then, you did make the point in your speech very clearly that there was a need for tight fiscal rules. Now, they can take any number of forms. There can be balanced budget rules based on debt or deficit. There can be targets in debt sustainability. There can be expenditure rules, many of which have been laid out for our purposes by the Fiscal Commission Working Group. I am sure you are aware of that. I am more intrigued about how these things are measured. The question I have for you is: irrespective of the set of rules put in place, I would imagine it would be any central bank’s job to measure these things as aggregate or composite numbers as opposed to a micromanaged investigation of every single spending line from both Governments. I take it these things would always be measured on the aggregate or composite numbers?

Dr Carney: Yes. I am not sure it is the central bank’s job per se to do the measurement, but what would matter is it is the aggregate. It is the macro position, whether it is a rule that is akin to the Maastricht criteria or to a more simple balanced budget rule that you referenced.

Q4 Stewart Hosie: Do you have a preferred set of rules for any currency union that you think are probably best, whether it is balanced budget rules or debt sustainability rules or expenditure rules? Or does it depend on the circumstances of each currency union?

Dr Carney: It depends on the circumstances of the union. It is a product of the degree of fiscal federalism, by which I mean the extent to which there are cross-border flows, support mechanisms, equalisation payments; different words for the same thing. What is

the fundamental criterion for the fiscal rule, though, is obviously medium and long-term debt sustainability. You have a case with, for example, the Maastricht criteria where there are issues not just with the non-observance of those criteria within the eurozone but their longer term suitability for some of the members, given that potential growth in those countries is much lower than originally assumed.

Q5 Stewart Hosie: That is quite a helpful answer because my next question is about similarity or difference. What you said in answer to your own question of what makes a successful currency union was that being similar does not necessarily help and being different does not necessarily hinder. You pointed to other areas: mobility of labour, capital structures, that kind of thing. As you said earlier in your speech in relation to Scotland and the rest of the UK, output growth is highly correlated. The question I have is: notwithstanding all of these other things need to be in place, is being highly correlated in terms of output or growth beneficial in terms of the long-term success of a currency union?

Dr Carney: To speak directly to the responsibilities of the Bank of England, it is beneficial to the suitability of monetary policy for the constituent members of the currency union. It is more difficult, a bit like the discussion we had on regional disparities, if policy is tight because of the weight of activity in one part of the union versus another. Yes, the economies are highly correlated and I provide evidence in the speech to support that. The counterfactual question, obviously, is to what extent that correlation could change if there were a change in the arrangements between Scotland and the rest of the UK.

Q6 Stewart Hosie: You were very clear in your speech that you were not making an assessment of Scottish independence, you were not passing judgment on the merits of any particular currency union, and that you gave what you said was a “technocratic assessment” of what makes for an effective currency union between two independent nations. I thought I would give you the opportunity to put on record today that that remains your and the Bank’s view: it is not a judgment on independence, it is not a judgment on a particular currency union, and it remains, the speech and at the moment the Bank’s position, a technocratic one. I think it would be useful to have that on this Committee record.

Dr Carney: I am happy to read that into the record. The speech and the Bank’s approach to this issue has been and will continue to be a technocratic approach. It is for others to address these issues and it is ultimately a decision for the Scottish people, which will be taken in the context of many other aspects of the broader issue.

Q7 Jesse Norman: Governor, might the small size of an independent Scotland’s economy, roughly one-tenth the size of the UK, and that country’s exposure to oil and gas sectors make an independent Scotland more volatile?

Dr Carney: The performance of the Scottish economy relative to the rest of the UK is more volatile because of the industrial structure, yes.

Q8 Jesse Norman: Might it become more volatile as a result of independence?

Dr Carney: One of the moderations of the volatility in the Scottish economy is a consequence of the fiscal arrangements of the United Kingdom Government. To put it in

simple terms, when the energy sector is relatively weak, when energy prices are softer, there is a natural slowing of activity in Scotland, all other things being equal.

Jesse Norman: But there is lots of evidence—

Dr Carney: If I may finish, the consequence of that is there is less revenue taken into the Government and there are more transfers paid out. That mitigates and dampens that volatility.

Q9 Jesse Norman: You would agree, though, that there is plenty of evidence that small countries—and Scotland would be roughly the size of Ireland, Denmark, Greece, Portugal, in that scale of things—tend to be more economically volatile?

Dr Carney: I hesitate to come to that conclusion.

Q10 Jesse Norman: Okay. Would the volatility you have described already of the Scottish economy make dollarisation more difficult?

Dr Carney: Dollarisation?

Jesse Norman: Yes, I mean the equivalent of dollars.

Dr Carney: Sterlingisation?

Jesse Norman: Well, sterlingisation; that is to say using sterling but without any formal mechanism or monetary union or currency union behind it.

Dr Carney: There are a variety of issues around an informal adoption of sterling, not least the absence of formal lender of last resort facilities, deposit guarantee systems, and the perceived—depending on how the arrangement were struck, whether it was a currency board or just purely an informal arrangement—medium-term credibility of the link.

Q11 Jesse Norman: Thanks. If there is a full currency union with a shared monetary policy, how many members would Scotland have on the Monetary Policy Committee?

Dr Carney: That would be a decision for Parliament.

Q12 Jesse Norman: Have you done some work on this, looked at options within the Bank?

Dr Carney: It would not be appropriate for us to do work that is ultimately a question of governance of the Bank, so no.

Q13 Jesse Norman: You have not explored how the Monetary Policy Committee might work if it had independent Scottish representation?

Dr Carney: What I would observe is that at present obviously the Monetary Policy Committee takes into account economic conditions in Scotland and the rest of the United Kingdom in setting an appropriate monetary policy for the monetary union that exists and it works very well.

Q14 Jesse Norman: If it was done on the basis of relative economic size, which has been a proposal that has been made by the Scottish Government, then there might be, as it were, one-tenth of the members would be Scottish so they would consistently be outvoted, or they could potentially be consistently outvoted?

Dr Carney: In a simple sense, yes.

Q15 Jesse Norman: If that were the case, could you imagine the MPC moving towards a consensus model of deliberation rather than an individual voting model?

Dr Carney: Well, again, that is a decision for Parliament. The structure that has been put in place, as you know, has many advantages, including individual accountability, so it would be quite a substantial change in the approach. The Bank's responsibility is to implement through the governance structures we are given according to the mandates.

Q16 Jesse Norman: I am slightly surprised that the Bank has not done any work that would allow it to establish whether this was possible or what its view might be on its advisability.

Dr Carney: Well, I am not sure why you are surprised by that.

Jesse Norman: Because we are potentially looking at a divorce.

Dr Carney: These are political questions.

Jesse Norman: No, it is not. It is an economics question about the administrative implementation of a contingency that may raise itself in a matter of months.

Dr Carney: The governance of the Bank under that contingency would be a political question, which would have to be determined by Whitehall. I would add it is a political question that the major political parties have ruled out, so we are not unaware of that. What we have done work on, as I think you would expect, is the economics of a currency union: what are the major issues; what are the risks; what are the opportunities; how those could be addressed as per the previous discussion.

Q17 Jesse Norman: Final question. When deliberation occurs on the Monetary Policy Committee at the moment, does Scotland get a separate moment where the impact of monetary policy on Scotland is discussed or is it factored into individual thinking and decisions as you go?

Dr Carney: There is not a separate Scottish moment, nor is there a separate Welsh moment or Dorset moment, whatever. We are well aware of conditions in Scotland: the Scottish economy, for example, the unemployment rate. The employment performance has been better than the rest of the UK. The economy is closer to its pre-crisis level. Credit conditions on the margin are stronger there. There has been more activity, obviously, on the production side than there has been in the UK, a variety of these factors. This is part of our regular briefing so we are aware of them, but we do not stop and say, "Okay, now—"

Q18 Jesse Norman: In your reading of the MPC or in your own position on it, has there ever been a time when people said, “We are not going to do this” because of a worry about Scotland or the effect on the Scottish economy?

Dr Carney: Not in my short tenure, no.

Q19 Chair: We have been discussing there the role of the MPC. I would like to draw your attention to something you said in your speech. I am paraphrasing very slightly and if you think the paraphrase is in any way incorrect we will read the whole passage. In a nutshell, you said if the right structures are not in place—that is the right structures in a currency union—capital flows in that union can undermine financial and economic stability of the members. Financial stability is a Financial Policy Committee concern. If the Financial Policy Committee concludes that a proposed currency union poses great risks to financial stability, is it the Financial Policy Committee’s duty to speak up?

Dr Carney: Yes.

Q20 Chair: Has the FPC discussed this?

Dr Carney: The FPC has not discussed this yet, no.

Q21 Chair: Why not?

Dr Carney: It is in part a product of the assessment of risks we have to prioritise. If this were to come to pass, in terms of the timetable of the Scottish Government there is a period of time over which arrangements would be developed. That is the first point.

Q22 Chair: But this is a risk that is going to come down the line very fast, Governor, and you are saying it is not a priority. You have just said you would speak on it.

Dr Carney: The second point, if I may, is that as you are well aware there is a referendum in September. There is a clear view of all the parties in Westminster on the possible arrangements after that referendum, which colours the probability of the types of financial stability risks that we could face.

Q23 Chair: I raise that question because the Permanent Secretary to the Treasury has felt that it was his duty to speak up on behalf of the Treasury. I am comparing and contrasting what he considered to be his duty with what you collectively in the FPC consider to be yours at the moment.

Dr Carney: My view as Governor is our duty has been to outline the issues around a currency union as clearly as possible, which is what I tried to do with my speech. I am obviously open today and any other time to answer questions around those issues.

Q24 Chair: May I just put it slightly differently then because I think we have more or less, unless there is a big point you want to make, exhausted this point? This is something that would become a huge priority in September were a decision for separation to take place and on which the FPC would want to opine immediately or as soon as possible. Is that correct?

Dr Carney: If the circumstances were to come to pass that there were the prospect of a change to the monetary arrangements in the United Kingdom that fell to the wrong side of the risks that were clearly outlined in my speech, we would provide clear and public advice on those. I can assure you, Chairman, and the members of this Committee that the Bank has done work on these issues and is well apprised of the potential risks.

Chair: That is helpful reassurance.

Q25 Mr Ruffley: Pursuant to Mr Norman's questions about the structure of the Monetary Policy Committee, those interesting questions about voting and the composition should Scotland achieve independence also apply to the FPC. You clearly do not want to get into party politics and start doing work you are not asked to do, but it is quite surprising that you appear, from what you have said, not to have had an instruction from Her Majesty's Government, in particular Her Majesty's Treasury, to do a bit of work on how the MPC and FPC post-independence might operate. Is that correct, there has been no contingency planning on that?

Dr Carney: That is correct.

Q26 Mr Ruffley: No instruction from anyone in Government to think it through?

Dr Carney: No instruction from anyone in Government to think it through. If I may add, Mr Ruffley, I obviously would not dream of speaking for the Treasury, but given the position of the Government and the Opposition, since there is no intent of having that contingency, in that regard it is understandable that that planning has not taken place. It is really a question for the Treasury, not for the Bank.

Q27 Mr Ruffley: Thank you. Would the Bank of England continue to act as a settlement agent for the UK payment system in a banking union?

Dr Carney: Yes.

Q28 Mr Ruffley: Would the Bank be content to continue offering reserves account and settlement services in the absence of a banking union?

Dr Carney: In terms of arrangements with Scottish-domiciled banks, there is a whole host of activities that we currently provide, starting from settlement, moving up to access to the sterling market framework, ultimately lender of last resort facilities. We would have to evaluate the suitability of those institutions for continued access in the event of independence.

Now, it very much depends. If you will permit me a moment, how we do that evaluation very much depends whether an independent Scotland was a member of the EU or the EEA. If it were, there are passporting rights. If not, we have to make an independent assessment of the solvency and viability of those institutions. One of the factors in that determination would be the credibility of the monetary arrangements, the viability of those monetary arrangements that were being put in place.

Q29 Mr Ruffley: One big factor in answering that question yes, you would continue, would be whether or not an independent Scotland was an EU member or an EEA member?

Dr Carney: Under EU law it makes a difference.

Mr Ruffley: Because of all the passporting, yes, sure.

Dr Carney: The passporting rights, that is correct. There are other aspects under EU law that would be relevant, which relate to the domicile of the institutions. Under CRD IV, the BCCI decision, effectively there has to be a determination where the mind and management of an institution is and—under EU law, where that is the case—the institution's head office should be domiciled.

Q30 Mr Ruffley: On a common deposit guarantee scheme, assuming that an independent Scotland and the rest of the UK wanted to agree on this, would the guarantee provided by each Government need to be proportional to the share of insured deposits for which it was responsible?

Dr Carney: Under EU law—let us stick with that—in the case that the bank were domiciled in Scotland, it would be the responsibility of the Scottish Government to provide a deposit guarantee scheme that was adequate to cover those deposits, not just in Scotland but in the UK, which would obviously be a considerable contingent liability.

Q31 Mr Ruffley: Right. Could the share of insured deposits for which each Government was responsible best be determined by considering the residence of insured depositors or the location of the banks holding the deposits? Does that matter?

Dr Carney: The question is could something like that be negotiated. I suppose it is possible. Again, it depends on whether Scotland is in the European Union or the EEA. It is a decision ultimately for Parliament, who would have the ultimate exposure to the contingent liability.

Q32 Mr Ruffley: If the PRA is a common supervisor of an independent Scotland's banking system in the UK, would a banking union be essential if RBS and Lloyds were to remain registered in Scotland but continuing to operate outside Scotland in the continuing UK? Would you need a full-on banking union?

Dr Carney: Well, I am sorry to sound like a European lawyer—I probably do not sound like one—

Andrea Leadsom: More Canadian, I think.

Dr Carney: Exactly, even worse. Under current law, the responsibility would not have a common deposit guarantee scheme, as one would ultimately hope in banking union in Europe, but a separate one in Scotland, continuing with FSCS in the rest of the UK; a resolution authority in Scotland, continuing with our resolution arrangements in the UK. The key question, which I will reemphasise, is that it is not clear in the European context that the domicile of the major banks in Scotland would remain in Scotland given the location of head office-like activities in the rest of the UK. It is obviously a non-issue at the moment and there are considerable higher value-added head office activities in

Scotland for those major banks, but a determination would likely have to be made. Obviously, I am speaking in the conditional.

Q33 Mr Ruffley: Sure. Were there not to be a banking union, would the PRA require RBS and Lloyds to subsidise in the rest of the UK or to move their registered office if they were to continue operating in the PRA jurisdiction?

Dr Carney: If Scotland were not a member of the EEA, that is a decision that the PRA would have to consider very carefully, yes.

Q34 Mr Ruffley: It has been reported that RBS and Lloyds might have to move their registered offices to the rest of the UK in the event of Scottish independence because of a 1995 EU Council directive. Is that correct?

Dr Carney: That is correct. I referred to that as the BCCI directive.

Q35 Mr Ruffley: Yes. Now, Scotland's banking sector is large in relation to its national income, as we all know. Does that mean that in the event of independence the rest of the UK would bear the liquidity and solvency risk of that Scottish banking sector?

Dr Carney: When you say "would", do you mean if there were a redomicile? If there were not a redomicile of the institutions, that risk, that exposure, would be to the Scottish Government. However, we would have to determine, given the tight links between the institutions and other UK financial institutions, whether prudent measures might need to be taken. Again, we would be influenced by whether Scotland were in the EEA or EU or not. If it is in, then we are limited in our ability to adjust.

Q36 Mr Ruffley: Would the Bank of England be willing to act as lender of last resort for RBS and Lloyds if Scotland adopted the pound outside a formal currency union?

Dr Carney: That is a determination we would have to take in the full context of their capital liquidity position, their domicile and other arrangements that the Scottish Government might take to reinforce the credibility of that.

Q37 Mr Ruffley: The answer in relation to lender of last resort services being rendered by the Bank of England to RBS and Lloyds might possibly be no, you would not be lender of last resort if they were outside a formal currency union. That is quite a statement.

Dr Carney: We can act as lender of last resort to branches and subsidiaries of foreign banks—and there is a large number, up to 39 or so, of those institutions—but we do not have to. We are very conscious of the exposure to the public balance sheet of those activities, so we would have to make that determination.

Mr Ruffley: I think I will leave it on that point.

Q38 Andrea Leadsom: If Scotland votes for independence and joins the EU, are you saying that RBS would have to move under EU rules to the remaining UK?

Dr Carney: It is a distinct possibility but I should not prejudge it. It depends on their arrangements as well if they were to adjust more into Scotland the mind and management of the institution.

Q39 Chair: “Distinct possibility”—

Dr Carney: I am a central banker.

Chair: —is a central bank phrase with a sort of layer of lawyer on top, isn’t it? Do you want to add anything to “distinct possibility”?

Dr Carney: Certainly not.

Chair: Are you sure you do not?

Dr Carney: Yes.

Q40 Mr McFadden: Governor, I would like to take you back to the speech that you made, which was entitled, “The Economics of Currency Unions.” You set out three or four criteria that are essential for the successful operation of currency unions. There is the free movement of labour, capital and goods. There is the banking union, which you have heard some questions on from Mr Ruffley about all the elements of a banking union. There is the fiscal commonality with fiscal transfers. Could you confirm that all of those exist in our current situation?

Dr Carney: Yes, I do.

Q41 Mr McFadden: This whole effort to form a currency union with common banking union principles, with agreement on fiscal strategy, and with whatever had to be decided on the movement of capital, labour and goods would be an effort to recreate what we already have?

Dr Carney: Yes, put that way that is correct.

Q42 Mr McFadden: That is helpful. In the event that a currency union does not happen, could you tell us something about the economics of Scotland continuing to use the pound without the currency union being agreed and without those elements in your speech being in place? A spokesperson for the Scottish Finance Minister has said something along the lines of neither George Osborne nor anyone else can stop us, that is the newly independent Scotland, from continuing to use the pound. What are the economics of doing that without these elements of a currency union being in place?

Dr Carney: Well, I can answer that by referring to other situations where countries have dollarised, in Mr Norman’s terminology, and there are a couple of cases. There are countries who just adopted the US dollar and there are countries who have backed that adoption or pegged with a currency board. It is partly because of institutional history in countries. The reason some of these countries would adopt the US dollar is because of the lack of credibility of their own institutions.

Mr McFadden: It has been referred to as importing credibility.

Dr Carney: It is importing credibility, but in order to reinforce that import of credibility, their institutions, particularly their banks, have had to carry much higher capital and liquidity buffers in order to ensure that that is credible because there is always a risk of a changing of the monetary arrangements. That is the first point.

The second is that in terms of currency board countries, the experience has been that the reserves of those countries—and I will take Hong Kong as an example—have been many multiples of the size of the underlying notes and coins in circulation. That is what they are backing. If you look at Hong Kong, which runs at recent estimates about US\$300 billion of reserves relative to a GDP that is about half that size, or underlying notes in circulation, which is still a fraction further smaller than that, these can be quite substantial numbers. Whereas in theory one only needs to have the backing and foreign exchange reserves that equal the amount of the currency in circulation. I would suggest that one of the reasons for carrying greater reserves is that ultimately—and Hong Kong is a very successful currency board, a very robust financial system, and so on—there is a question in that case in terms of the long-term direction of travel of their currency arrangements. As time progresses and China emerges and the renminbi becomes an international currency, there is greater logic to Hong Kong being linked to the renminbi. To the extent to which a sterling area is a permanent feature and seen as being a permanent feature of the monetary arrangements on these islands, that would reduce the amount of reserves that would need to be held. But to the extent to which it is temporary or seen to be temporary or perceived to be temporary, I should say, then the amount of reserves would have to be higher. That is at some fiscal cost in order to build up those reserves.

Q43 Mr McFadden: That is because if this arrangement was seen as possibly only temporary it would be tested and, therefore, the independent Scottish state would need to have very substantial currency reserves in order to fight off that testing of these arrangements. Is that reasonable?

Dr Carney: That would be a risk for which it would be prudent to provision.

Q44 Mr McFadden: Is it necessary for countries in this situation, which want to use the currency of another state but do not have the common arrangements you set out in your speech, to run a permanent balance of payments surplus?

Dr Carney: Well, in order to build the reserves, there is a need to run a balance of payments surplus, by definition, in order to build up those reserves. There is a measure of reserves at present in the Scottish banking system. Those Scottish banks that issued the notes in Scotland—90% of the notes in Scotland, as you know, were issued by Scottish banks—are backed by sterling or the highest quality assets, deposits effectively, with us to back that. That is an initial £6 billion that could be accessed.

Q45 Mr McFadden: That would be the foreign currency reserves?

Dr Carney: Well, I should say that that would be at the low end of a figure given international comparisons.

Q46 Mr McFadden: If I asked you your assessment of whether £6 billion would be enough to withstand the kind of testing that you have set out compared to the example that you gave us of Hong Kong, what would your view of that be?

Dr Carney: Hong Kong, which I put at one extreme, has a multiple of its GDP in reserves and Scottish GDP is considerably higher than £6 billion.

Chair: That was a very interesting exchange indeed.

Q47 Andrea Leadsom: Governor, presumably Scotland could decide for independence to join the EU and to apply for European banking union since European banking union is not only available to those who are part of the eurozone. Under those circumstances, can you just talk us through what then would be the implications for the Bank of England? Presumably, then, Scottish banks would be regulated by the ECB, not by the Bank of England. What would then be the consequences for monetary union under those circumstances? Is that more or less likely to be available to the Scottish?

Dr Carney: There would be advantages of that arrangement in terms of an established, about to be newly established, single supervisory mechanism, although, as you are no doubt aware, the single supervisory mechanism of the ECB also relies on national supervisors for smaller local firms. There would need to be some capacity built up there.

It has the advantage, obviously, of having a single resolution mechanism as well, which addresses one of the issues. It does not have the advantage of a common deposit guarantee scheme, which still would need to be built up. It would be a matter to be determined in terms of the lender of last resort arrangements between Scottish institutions and the ECB or, more likely, some determination within a currency union with the Bank of England.

Does it make it more viable? It is a mechanism. Obviously, as we have been discussing, there is a wide range of factors that would determine viability. Viability in a currency union is a bit like being pregnant: you cannot be half viable in a currency union.

Andrea Leadsom: I am not sure it is like being pregnant.

Dr Carney: Well, it is in that you need all the components. It would advance it, but the other elements would need to be put in place. You have to look at the package of elements.

Q48 Andrea Leadsom: Okay. Does the Bank of England have any statutory or historical or moral or in any sense need to help Scotland to determine its own monetary independence arrangements in the event that it votes for independence? Would you feel you ought to or do you feel you have to take steps to put them in a good position? Quite clearly, if Scotland does vote for independence and then, as you have just indicated, puts in place £6 billion of foreign reserves, that is not going to cut much mustard, if we can use some peculiar analogies. What would the Bank of England expect to do and what thoughts have you had in terms of how you might have to or want to help them?

Dr Carney: There would be political decisions that would need to be taken in the event of a yes vote for independence. We would very much adopt the position in these fundamental issues, almost constitutional issues, of being guided by our political masters. We obviously would execute against that so—

Q49 Andrea Leadsom: Sorry, are you specifically saying you would only help them if you were told by the Government of the day to help them to put in place their own financial arrangements?

Dr Carney: As I said at the start of my speech, we are not constitutional lawyers at the Bank of England. It should be evident by my testimony today I am not a constitutional lawyer. We are not the ones to make those determinations. Others will make those determinations. Others will decide.

Q50 Andrea Leadsom: To be clear then, the Bank of England has no statutory obligation to support Scottish separate financial arrangements?

Dr Carney: The constitutional question—the question, not the answer—in my reading of it is: who is the continuing entity? That is an international question. It is a domestic question. Under the various statutes that govern the Bank of England, is the rest of the UK the continuing entity? Others will determine the answers to those questions. I am not qualified to answer that question. That will determine the actions of the Bank of England.

What we will do and what we have done is provide, as we would to any political party in advance of a major political event, technical assistance and perspective to the interested parties, which we have done to the Scottish Government and we will continue to do as it is requested.

Q51 Andrea Leadsom: With a financial stability hat on, would you see the financial stability of an independent Scotland as only, for example, equally important as your interest as Governor of the Bank of England in the financial stability of the eurozone? Is it equivalent or is there more of an interest?

Dr Carney: Interest in the financial stability of the eurozone is very high, so it is not a bad analogy. Given the structure and the interlinkages between the financial system in Scotland and that in the rest of the UK, it would be material, yes.

Q52 Andrea Leadsom: Okay, thank you. The final question: would Scotland need to establish its own currency before joining the euro or could it apply to join the euro straight away in your opinion?

Dr Carney: Again, a question of continuing states and European law in this case, but if I take President Barroso's comments as the starting point Scotland would have to apply to join the European Union. That application, as for any new application to join the European Union, would include a commitment to join the euro, not just take the *acquis* but to join the euro in the fullness of time.

Q53 Andrea Leadsom: If countries are required to join ERM II as part of the euro convergence criteria—

Chair: Let us stop there. I think he has just said that.

Andrea Leadsom: Okay.

Dr Carney: Yes.

Q54 Mark Garnier: Governor, can I turn back to this question of the currency board? You used the example of the Hong Kong dollar, which is very, very robustly supported. Of course, the Hong Kong dollar currency board came about as a result of a very, very strong raid on the currency about 40 years ago, if I remember rightly. Subsequent to that, even though it has been very strongly backed, there have been a number of other raids on it. I think in the early 1990s there was a situation where there were negative actual interest rates in Hong Kong to support it. That is one of the best, in your words, supported currency boards in the world. We are now looking at a potential currency board in an independent Scotland, if there is not currency union, which is far, far less supported. By inference, are you suggesting that that currency board would be tested on a fairly regular basis and that it could be broken quite easily?

Dr Carney: No, I do not want to invite that. Arrangements could be put in place to be consistent with a durable currency board. However, careful thought would have to be given to the orders of magnitude and the fiscal cost of doing that, the time over which those reserves could be built up, and I also think it is a function of the degree of commitment to the arrangement. If it is a temporary arrangement it is a more difficult arrangement, in my opinion, than if it is viewed as a permanent arrangement. It is a function of all those factors.

Q55 Mark Garnier: What about free-floating currency, is that a possibility?

Dr Carney: It is a possibility. The Scottish Fiscal Commission looked at all these possibilities and made its determination that the best interests of Scotland, if I may use their words, and the rest of the UK would be a currency union. Countries introduce their own currencies. You need institutional structures. There is always a test of the credibility of those currencies in terms of commitment to monetary stability and the underlying dynamics of the financial institutions. There would be questions about redenomination under Scottish law of some contracts. There are a variety of issues. I am not privy to the determinations of the Scottish Fiscal Commission, but they did look at this issue and determine that it would be, as I say, in the interests of Scotland and the rest of the UK, in their words, for a formal currency union.

Q56 Mark Garnier: So currency union is a bad idea for the UK and something that you do not support? A currency board is something that could be tested quite aggressively, and a free-floating currency is one that is problematic legally?

Dr Carney: I am afraid I want to read this into the record. I have been absolutely clear and I will continue to be clear that what I have tried to do, what the Bank has tried to do, and what we will continue to do is to draw attention to economic issues that the interested parties can address and then others can make the judgments. At no time have I said or will I say that I do not support or that I advocate a currency union, either side of the debate.

Q57 Mark Garnier: But you have created a less than optimistic picture in your speech of a currency union.

Dr Carney: This is a very serious issue. I welcome the fact that we are discussing it. What the speech has done and I hope my answers are doing is to draw attention to the

underlying economic questions that, again, those on either side of the debate can determine how to address.

Q58 Mark Garnier: Can I ask one more question about general financial regulation? The significant part of the Scottish economy is based round the financial services industry and a lot of that is based on the fact that they are regulated by the Financial Conduct Authority. We have looked at the PRA but we have not looked at the FCA. Were Scotland to become independent, presumably it cannot be assumed that Scotland will continue to be regulated by the FCA?

Dr Carney: No. Again, I do not speak for the fiscal commission but my understanding of the intention is that Scotland would introduce its own conduct authority. It was very explicit about that. Where there is more of an open question left, speaking to Mr Hosie's control question, is the arrangement with the PRA, whether there would be a separate regulator or there would be some sort of contracted relationship with the PRA for prudential issues.

Q59 Mark Garnier: We have already seen a number of institutions—Standard Life, I think—have already indicated they will be looking to move south if there was independence, and one or two others have suggested that as well. I hesitate to ask you to share your opinion of something, but in your opinion would it be problematic to start off with for a newly formed independent country to try to instigate a financial supervisory regime quickly that would be to the satisfaction of those institutions that rely on the importance that consumers attach to good financial regulation?

Chair: You are not obliged to answer that question but anything you say may be taken down.

Dr Carney: There have been considerable changes to the form and structure of conduct regulation in a variety of jurisdictions in the recent past and over time. It is not beyond the ability of man to set up a new conduct regulator. It would take a period of time, but it is a question of transition.

Q60 John Thurso: Governor, can I return to what you called the dismal science in your speech? If Scotland becomes a foreign country and the remainder of the UK another foreign country and Scotland seeks a currency union with that which is 90% of the union—Scotland would be about 10% as you said before—what would remainder UK need to be satisfied about to ensure that the risks of the union were worth taking on?

Dr Carney: Ultimately, the question is whether it is a durable currency union because there could be very considerable costs to financial stability—and ultimately to underlying economic stability and outturns—from any unplanned change to those currency arrangements that were put in place. In order to be satisfied as to durability, the series of issues that we have been discussing around banking union would have to be satisfied. There are various ways to satisfy them, but they would have to be satisfied. There would need to be, whether through European arrangements or buttressed by other arrangements, confidence that the three freedoms of movement of labour, capital and goods would be preserved. Undoubtedly, I should add, there does tend to be some border effects between nation states that develop over time. It is less seamless between nations and beyond.

There would need to be some form of fiscal arrangement put in place, at a minimum fiscal rules. One of the risks here is that there is a contingent liability that builds up. I will give you the example of the eurozone. Everyone is familiar with events over the last five years. There is famously a no-bail-out clause in the Maastricht Treaty, but when push came to shove with risks in the periphery that was not fully credible, because the spill-over effects of not bailing out or not assisting in some sort of arrangement were judged in the teeth of a global crisis to be too great to risk. There were extraordinary and appropriate efforts made by European officials to avoid that.

The issue for the rest of the UK would be—I am not predicting this but one has to plan for a contingency—would it be credible to stand by if an independent Scotland were to be in fiscal difficulties. If it is not credible, then the structure of the currency union obviously is less than perfect, but it is also taking on a contingent liability or responsibility to the rest of UK balance sheet. These are all issues that have to be thought through in advance.

Q61 John Thurso: Can I take you to your speech? Firstly, which has been touched on relating to the financial services industry, you had some interesting graphs and tables at the back of your speech. One was, I think, table 4, which showed the relative size of the different financial services industries as a ratio of GDP. You noted both Ireland at 7.1 and Iceland at 7.4 times GDP, and you noted that Scotland, if taken out of the United Kingdom, was 12.4, I think from memory, while the remaining UK came down to about 4.5. Is any multiple of over 12 of GDP even remotely sustainable for a sovereign country with a financial services industry of that scale and size?

Dr Carney: Well, certainly extraordinary. The way the financial services industry is currently organised it runs much greater risks. Let us make a very safe statement there. Now, the way we intend to organise the financial services industry, particularly the banking sector, the sustainability of large banking sectors relative to the size of GDP should increase. Specifically, and I will not go into all the detail here, the efforts to end too big to fail will have a real impact on the size of banks that we in the UK as a whole can sustainably maintain, as will—this is a bit less of an issue for Scotland but it is relevant to capital markets and heavy financial sector—the way we organise those markets through hard infrastructure, central counterparties, for example, soft infrastructure, rules or conventions on the use of collateral and other aspects. It can make it more viable.

To go back to current reality, obviously a much larger financial services sector relative to GDP runs great risks. The credibility of the backstopping of those institutions has been called into question in countries where the size of the financial services sector relative to GDP was much smaller. That does have to be taken into consideration. I will say, just to link some of the discussion, that again in an EU context there is a question of whether ultimately those institutions would remain headquartered in Scotland or whether they would redomicile. Obviously, if the latter were the case, it shifts the exposure with the consequence also, though, of shifting activity and higher value-added activities from Scotland.

Q62 John Thurso: Can I turn to the fiscal side of your speech? You made a number of points: it is no coincidence that effective currency unions tend to have centralised fiscal authorities. Another one: fiscal stabilisation is particularly important in a currency union

because it helps mitigate the loss of exchange rate flexibility. I could go on. You have set out in your speech some very strict tests or rules that would need to be brought into being if a union were to be contemplated. At the same time, the Scottish Government published a White Paper that sets out a great many of the actions they would wish to take and which involves quite a considerably looser fiscal approach than that in the current UK with quite different spending and taxing patterns. To what extent have you analysed what is put forward against the rules necessary and worked out which policies would not be able to fit within the rules?

Dr Carney: I am familiar with the Scottish Government's White Paper and the major fiscal components of it. I would very much prefer not to voice an opinion on the specifics of it. Those are political decisions and I have a very strong view that the role of the central bank is not—

Q63 John Thurso: I respect that, but let me rephrase the question to you, which is to say in your view would it be necessary in setting about a set of fiscal rules for the policies that might be adopted to follow those rules rather than for the rules to follow the policies that may be adopted? Do the rules come first and foremost?

Dr Carney: To rephrase what you just said, the determination of rules that would support a viable currency union should come first, and then within that budget constraint very appropriately the political decisions of how to use that should come second. I will add that in the determination there is a question that is all related to banking union and free movements of labour and others. There remains a residual question of whether ultimately a rules-based currency union is fully viable or there needs to be some form of cross-border fiscal flows. I will draw your attention, as I did in the speech, to what the medium-term effort is in the eurozone, which is to build elements of that. It is not just about risk sharing but is clearly outlined in the report of the four presidents to develop some element, whether it is through the labour market or some other component of fiscal federalism, something more akin to cross-border flows that help equalise fluctuations.

Q64 John Thurso: To be clear, what we are saying is a set of rules is not enough. There has to be a good deal of cross-border fiscal—

Dr Carney: What I am saying is the experience of currency unions has been that there has been both, so a determination would have to be that only rules were sufficient. That determination would be made in the context of how other issues are addressed and the historic integration of the two economies.

Q65 Chair: That is very helpful. Just to be clear, you are going a long way down the road of saying that the recent empirical experience, not least from the eurozone, is that any system of rules will be vulnerable to the risk of bail-outs however strong the no-bail-out rule may apparently be entrenched unless there are also significant cross-border transfers?

Dr Carney: Can I answer it this way? My view is that the eurozone needs to build that form of fiscal federalism to be viable over the medium term.

Q66 Chair: Yes, and that, therefore, any currency union between the rest of the UK and Scotland would also require extremely strong rules to avoid the risk of bail-out?

Dr Carney: I will answer that by saying that that is an issue that needs to be analysed, is being analysed, and others will make a judgment on the viability of those answers.

Q67 Chair: Have you done any analysis in that area, Governor?

Dr Carney: I have views but not that I am willing to share. Not that I would prefer to share; maybe I should show more respect.

Q68 Chair: I understand, but you did say earlier, right at the beginning, that there is some work going on on all this in the Bank of England?

Dr Carney: Yes, very much. There has been, as you would expect, work in terms of the economics of this, into the series of regulatory issues and contingencies that members have raised, down to contingencies around no issuance and how we would handle whatever is decided ultimately by the people and by the relevant political authorities.

Q69 Chair: I know you are Canadian so it probably does not mean so much to you, but you have played a very elegant, straight bat to every single question you have been asked in the past hour, which is very impressive. We would like now to move on to the Forex issue. Would you prefer a five-minute break?

Dr Carney: If you do not mind.

Chair: Okay. I think we will take another five-minute break and then go on to Forex.