



BANK OF ENGLAND

# Speech

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## **Bank of England polymer consultation programme**

Speech given by

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Norfolk Chamber of Commerce

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I would like to thank Victoria Cleland, Rosey Jeffery and Roy Whymark for comments and contributions.

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Good afternoon. It is a pleasure to be here speaking to the Norfolk Chamber of Commerce on a topic that is always important to me and is currently of great interest to many: the future of our banknotes.

This meeting is part of the Bank of England's recently launched ten-week consultation to understand the public's views about printing the next £5 and £10 notes on polymer, a form of plastic, rather than the existing cotton-paper material. As you may have heard, the Bank believes that a change to polymer will lead to cleaner, more durable, more secure banknotes that are cheaper to produce.

The launch of the consultation has prompted much interest, including from attendees at our events. There have been a few common questions amongst the press, businesses, and the public. Among these, we have been asked: 'Given these benefits, why is the Bank proposing a switch to polymer only now?'; 'If the Bank is so confident of the benefits, why is it consulting?'; and 'If polymer banknotes are such a good idea, why aren't all central banks making the switch?'. These are all valid questions and I want to spend my time today addressing them.

But before I do, it is important first to take a step back and consider the Bank of England's responsibilities and aims as the sole issuer of banknotes in England and Wales. Our job is to ensure that the public can obtain good-quality, genuine banknotes where and when they are needed. Making sure that the public can access the right note, in the right place, and at the right time is what we at the Bank refer to as ensuring *confidence in the currency*. Despite the emergence of many other payment methods, banknotes remain an essential part of everyday life: the value of cash-financed transactions during 2012 was £267bn and the value of notes in circulation increased once again. And maintaining confidence in the physical currency continues to be important for broader monetary stability.

This task is not new. We have been producing banknotes for over three centuries. Yet, although our objectives are long-standing, the environment in which we operate is constantly changing, and it is incumbent upon us to respond and be flexible to that change. That includes periodically reviewing and updating the design and security features used on our banknotes.

### **Why are we proposing polymer only now?**

The starting point has to be a recognition that a move to polymer banknotes would be a significant step and one which should not be taken lightly, given our long history of successfully issuing paper banknotes.

Viewed through that prism, the key reason that previously we have not proposed the change is the absence of factors pushing us to move away from our current paper-based notes. Over the past half century since we first incorporated historic characters on our notes, the Bank has periodically replaced its paper-based note designs, each with a more sophisticated successor. Our notes have been secure, confidence in the

authenticity of our banknotes has generally remained high<sup>1</sup>, and in the main we have received positive feedback from the public.

But over the recent years, the case for considering change has grown. This reflects both 'push' and 'pull' factors. On the push side, technological innovation has facilitated an increase in the sophistication of counterfeiting techniques used within the UK. Counterfeiters have become more capable of producing passable fake banknotes and have taken advantage of increasingly sophisticated photographic and copying equipment that is commercially available. As their capabilities have grown, we have become somewhat more reliant on law enforcement efforts to deter would-be counterfeiters. Although counterfeiting rates remain low relative to the stock of notes in circulation, they tend to fall when gangs are disrupted and rise in intervening periods, so that annual counterfeiting rates have taken on an increasingly saw-tooth pattern. In this context, the Bank has increasingly come to the view that it needs to bring about a step change in the resilience of our banknotes.

The need for high resilience has been reinforced by the increasing challenge that the Bank faces whenever it changes one of its note designs. In part, this is just a matter of scale – in response to demand, the stock of notes in circulation has almost doubled over the past decade. But there is also a technological dimension: during that time there has been a significant increase in cash handling machines – particularly cash accepting machines – all of which need to be updated when we introduce a new design<sup>2</sup>. As a result, the elapsed time from the decision to the actual issue of a new note has grown in order to allow for the adaptation of machines. A side-effect of these developments has been a reduction in our ability to issue quickly a new design in the unlikely event of a counterfeiting attack leading to loss of confidence in one of our notes.

The growth in the number of ATMs during the noughties also had the unintended consequence of causing a drop in the average quality of £5 notes. ATMs, which predominantly only dispense £10 and £20 notes, became the dominant channel through which new notes entered circulation. With fewer fivers entering circulation, retailers tended to hold on to them rather than return them to wholesale cash handlers for quality sorting. On average it took longer before the average £5 returned to the wholesale system, and notes which would normally have been withdrawn on quality grounds remained in circulation, leading to concerns about 'tatty' fivers. Although we have had some success more recently working with ATM operators to increase £5 dispense<sup>3</sup>, this episode created a second, quality-based, reason to consider the benefits of changing the design of our notes

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<sup>1</sup> The Bank started surveying public attitudes towards banknotes in 2008; since then 83% of the public have on average agreed with the statement that the probability of receiving a counterfeit banknote is low.

<sup>2</sup> There are now 66,000 ATMs and 30,000 self-service checkouts in use in the UK. This is an increase from around 41,000 ATMs in 2002 and virtually no self-service checkouts. (Source: Payments Council).

<sup>3</sup> For more details see <http://www.bankofengland.co.uk/publications/Pages/news/2012/043.aspx>

The “noughties” also saw an increase in the pull factors to consider notes printed on materials other than paper. As more countries experimented with polymer (as pioneered in Australia 25 years ago), there was a growing body of evidence suggesting that such a move could improve cleanliness and lower counterfeit levels. The range of sophisticated security features which could be applied to polymer grew steadily and towards the end of the decade paper-polymer combination banknotes became possible potentially offering additional security, and improved durability opportunities.

In response to the change in the intensity of the push and pull factors, the Bank launched an in-depth assessment of the respective merits of banknotes printed on paper, polymer, or a combination of the two towards the end of the last decade. Our aim was to provide as comprehensive a picture as possible of the issues associated with any change. Accordingly, our analysis has considered: counterfeit resilience and quality analysis; the impact on production costs; the environmental impact; the effect on cash handlers; and attitudes of the public to possible changes. We completed the work earlier this year and our findings have provided the basis for the key messages that we have been setting out during the current consultation programme. These are that polymer notes are cleaner, more durable, more secure, and over time they will cost less to produce. An independent study that the Bank commissioned has concluded also that polymer notes have a smaller environmental impact than paper notes.

Drawing this together, the answer to the ‘why not earlier’ question is that until relatively recently there was neither sufficient push nor pull to consider a switch to polymer. Technological developments changed the Bank’s assessment of those factors, prompting a review which started towards the end of the last decade. Recognising that changes like this are rare events, we have taken our time and have sought to undertake as comprehensive an analysis as possible before reaching the point we are at today.

Before moving on to the role of the public consultation, however, it is important to clarify one point. The option of continuing to use paper remains open. Many private sector firms invest considerable research and development resources to develop new security features for paper banknotes. Were the Bank to continue to issue paper notes, it would be possible to introduce designs which are more advanced than our current notes, increasing their resilience to counterfeiting. And we should be able to improve note quality somewhat by making adjustments to the way in which paper notes are manufactured. But it is our view that switching to polymer would provide the greatest enhancement to future note security and lead to a greater improvement in note quality.

### **Why are we consulting the public?**

Given the conclusions we have reached, why the public consultation? The answer is simple: as a universal method of payment, banknotes are designed to circulate freely across the economy, to be given and received by anyone. They are part of our everyday lives. Notwithstanding the conclusions of our research,

there would be no point in changing to polymer if the public-at-large had material misgivings, and a clear wish to retain banknotes printed on paper.

Before launching the public consultation, we commissioned two rounds of independently-managed focus groups. Those focus groups gave a basis for anticipating that the public would be receptive to polymer banknotes. Indeed feedback from many participants was quite strongly in favour of the change, especially those in the second round who had the opportunity to handle sample notes similar to those that the Bank is sharing with the public during the current consultation.

However, we solicited the views of around only 120 people across the focus groups. And although the groups were designed to be representative of the population they were closed events. The aim of the consultation therefore is to get feedback from a much larger number of people and to do so in as inclusive a way as feasible. This is why the open events where anyone can turn up on the day and give us feedback, such as the event that I will be attending at the Grafton centre in Cambridge tomorrow, are an important part of the consultation. We believe that feedback we gather over this ten week period will provide a robust insight into public attitudes and enable the Bank to make a well-informed decision.

The same objective stands behind the additional industry engagement we are carrying out in parallel with the public consultation. To date, we have undertaken confidential consultations with the most important parts of the cash handling industry. This has included sending out two rounds of questionnaires to a selection of wholesale cash firms, cash-in-transit carriers, financial institutions and major retailers. The feedback from these consultations was broadly supportive of a move to polymer. Although the cash industry was alert to the additional costs and effort involved in transitioning to polymer banknotes compared to a like-for-like new paper note, there was recognition, and general appreciation by many, of the potential benefits. As well as the improved counterfeit resilience, the cash industry was particularly aware of the advantages of more durable notes. Since tatty paper notes are often the cause of banknote machine jams and downtime, better quality notes would improve this and lead to greater efficiency in banknote processing.

But until now we have not been able to engage with all categories of firms potentially affected by the proposed change. Our additional industry consultation will enable us to confirm the perspectives of the major players that we have already consulted and, through the five open industry forums that we are holding, to engage with as many categories of institutions affected by the potential change as possible.

It is possible that this final stage in the consultation process will throw up issues that mean we need to revisit our plans. Most obviously, the public consultation could demonstrate that, contrary to the evidence from the focus groups, a move to polymer would not meet with broad public acceptance.

Short of that, but perhaps more likely, the current consultations will highlight issues that would need to be managed especially carefully during a transition to polymer. Any such information would help us work with

institutions that handle cash and to educate the public so as to minimise the adjustment costs associated with a move. This too would be a valuable outcome from the consultations.

### **If polymer is so good, why aren't all central banks adopting it?**

Finally, given the outcome of our research, why aren't all central banks switching to polymer? The short answer is that countries are different and have varying needs and circumstances.

To give one example, a central bank's assessment of the merits of different materials for banknote printing will be informed by the nature of the counterfeiting risk that it is exposed to. The most obvious is the *degree* of counterfeiting experienced. Last year, 719,000 fake Bank of England notes were withdrawn from circulation. That is a very small number compared to the stock of notes in circulation: for every one million genuine notes in circulation that equates to just 247 fakes. Moreover, given counterfeits are removed from circulation very quickly the chances of us as individuals coming across one are very low. But some countries are more fortunate in the sense that counterfeiting is exceptionally rare. One example is Norway, where the equivalent statistic last year was just 2 counterfeits per million genuine notes.<sup>4</sup> The *type* of counterfeiting will also be a factor. The substantial technical challenges which counterfeiters would face when trying to reproduce a polymer banknote may be more beneficial in a country like the UK where counterfeiting is often associated with organised gangs than in countries which are typically home to less sophisticated counterfeiters.

Similar points apply to banknote quality. Until the growth of ATMs inadvertently created some issues with the quality of our fivers, we had generally been satisfied with the quality of our notes. Yet in countries with hot and humid climates, polymer offers durability and quality benefits over paper independent of the circulation model of cash; and this is one reason why a number of early adopters of polymer were countries with less temperate climates than ours.

Beyond circumstances concerning counterfeiting and quality, the costs and appetite for change are likely to vary across countries. For example, it is plausible that there might be more resistance to the change associated with a paper to polymer switch in the euro-area, where national currencies were replaced by the euro relatively recently than in the UK, given that that the template for our notes has remained unchanged since we reduced size in the early 1990s.

For these, as well other reasons, we should expect countries to reach different conclusions about the most appropriate material for their banknotes and for those judgements to change according to their circumstances. So, while I think it is more likely than not that other countries will decide to introduce

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<sup>4</sup> Source: Norges Bank Annual Report 2012, page 157:  
[http://www.norges-bank.no/pages/93314/annual\\_report\\_2012\\_payment\\_systems.pdf](http://www.norges-bank.no/pages/93314/annual_report_2012_payment_systems.pdf)

non-paper based notes over the next decade, many may not. In general, where there is choice consumers will make different decisions reflecting their individual circumstances, and in this regard central banks' choices about banknote substrates are no different.

### **Closing remarks**

So what is next for us? Our public consultation runs until 15 November. Ahead of making a final announcement in December, the Bank will consider the feedback received from the public alongside the information gathered from the research programme and industry consultations. We are committed to being transparent about the justification for our final decision.

Thank you for listening.