Polymer banknotes

Counterfeit resilience

The Bank of England is responsible for maintaining confidence in the currency, by meeting demand with good quality, genuine banknotes that the public can use with confidence.

To support this objective, for the past three years the Bank has been conducting a research project assessing the substrates (materials) that banknotes are printed on with a view to further enhancing counterfeit resilience and increasing the quality of banknotes in circulation. In particular, the Bank has been reviewing the relative merits of printing banknotes on polymer compared with cotton paper.

Counterfeit resilience assessment

Key to this research was a counterfeit resilience assessment of the different substrates. This included investigation into the techniques currently used to counterfeit Bank of England and foreign banknotes. Detailed analysis of the time, effort and cost required to produce reasonable quality counterfeits on each material was undertaken.

Our research highlighted that polymer banknotes can include many of the security features already familiar to the public including raised inks and foils. Polymer also provides a good platform for incorporating sophisticated security features not available on paper banknotes. For example, clear portions in the design, referred to as ‘windows’ can be used. While windows can be used in principle on paper banknotes, the scope for their use is more limited. Polymer notes allow for the inclusion of intricate and complex windows, which can be a security feature in their own right. They also allow security features to be placed on top of the window, meaning they can be seen from both the front and back of the banknote.

Whilst no banknote is, or ever will be, counterfeit proof, our research suggests that techniques required to produce high quality counterfeit polymer banknotes are slow, expensive and require a high level of effort and technical expertise. The machinery and techniques required are also different, for example standard desktop printers are designed to print on paper, but not on polymer film. Combined this presents a significant barrier to counterfeiters.
Experience from other countries

As part of our analysis, we consulted with a number of central banks on their choice of material. Where data is available, those banks issuing polymer banknotes have reported an overall reduction in counterfeit levels. For example, the Reserve Bank of New Zealand has stated that there has been a ‘very significant reduction in counterfeits detected by the processing machines at the Bank since the introduction of polymer notes’.¹

Next steps

Following our research programme, the Bank is considering the introduction of polymer for the recently announced Sir Winston Churchill and Jane Austen notes. However, we recognise that the public takes great pride in their banknotes, and that changes to the design and format of notes are consequently of great interest. Because of this we have decided to consult with the public before making any final decisions.

Therefore the Bank will be running a consultation programme between 10 September and 15 November that will provide the public with a greater familiarity with polymer banknotes. The consultation will, in turn, provide us with a better understanding of the public’s views on the proposed change and, whether such a change would meet with broad public acceptance. A final decision will be announced in December.