

HOW TO ABOLISH THE CHEQUE CLEARING SYSTEM  
BUT KEEP AND IMPROVE CHEQUES

*Nicholas Bohm and Jack Lang*<sup>1</sup>

- 1 In 2009 the Payments Council, on behalf of the UK banks, proposed that the cheque clearing system should be abolished in 2018, provided that some satisfactory replacement could be found. In 2011, under pressure from the Treasury Select Committee and the Government, the Payments Council abandoned its proposal, and undertook instead to concentrate on improving the processing of cheques behind the scenes. Until then, the Payments Council had been working on a paper-based replacement for cheques. This paper looks at how digital signatures might be used with a paper payment instrument to streamline the clearing system and make other improvements.
- 2 Payments are increasingly being made by credit and debit card, or by direct bank-to-bank payment initiated by the customer by telephone or through online banking. But there remain a number of cases where these methods are unsatisfactory either to the payer or to the recipient. Not all bank customers are willing to use credit or debit cards (and cases continue to arise where a bank refuses to reimburse a customer who claims to have been the victim of fraudulent withdrawal of funds through the use of a card). Similarly, not all customers are able or willing to use telephone or internet banking; nor are these methods a satisfactory way to pay, for example, a plumber who expects payment on completion of a call-out in an amount for which the customer cannot be expected to keep enough cash available. And not all small traders, clubs or charities can accept payments by card.
- 3 The drawbacks of cheques should nevertheless be acknowledged. Their use in their present form requires a clearing system, under which the recipients send the cheques they receive to their banks, who present them through the clearing system to the issuers' banks for payment. The issuers' banks must decide for each cheque whether it is genuine, and whether funds or credit are available to enable it to be honoured. This costs money and takes time; and until an uncertain time has passed, a cheque recipient cannot know that the cheque has been met on presentation. And if a cheque is sent by post and stolen, the thief may be able to open a new account in the recipient's name (using forged credentials), obtain payment and disappear before the cheque can be stopped. In such a case the true owner can only recover the loss from the bank who

---

<sup>1</sup> Nicholas Bohm is General Counsel to the Foundation for Information Policy Research. Jack Lang is a Fellow of and Entrepreneur in Residence at the Judge Business School, University of Cambridge. The authors gratefully acknowledge the benefit of comments on a draft of the paper from Ross Anderson and Brian Gladman.

opened the account for the thief if the bank acted carelessly or dishonestly; and among the by-products of the digital age has been the ease with which convincing credentials can be forged, so that even a careful bank can be deceived.

- 4 Cheques have their virtues too. Perhaps the first is convenience to the payer: cheques can be written on the spot for any amount, and handed or posted to the recipient. Payers by cheque also have valuable legal protection from fraud: if a bank pays the value of a cheque which has been forged, however careful the bank has been, it must reimburse the customer and stand the loss itself – and the burden of proving that a cheque was genuine falls on the bank. Recipients also get some benefit from taking a cheque: once a cheque has been given, it can be enforced through the courts, and the payer cannot dispute the debt for which it was given. And finally, customers can obtain from their bank a cheque drawn by the bank in favour of the recipient. Such a cheque, usually called a banker's draft, commits the bank to payment, and so is more or less as good as cash (but much more convenient than cash if the amount is large).
- 5 This paper suggests how the present system of cheques might be adapted to dispense with the use of a clearing system while achieving many of its advantages and removing at least one of its drawbacks. But the problem of paying the called out plumber seems insoluble for those unable or unwilling to use the internet, leaving cash as the only method.
- 6 In short, the banks should provide their customers with crossed cheques issued by the banks in favour of named recipients. To improve security, the name of the recipient and the account number of the recipient's bank account should be included in the cheque. To improve acceptability, the cheques should include a digital signature by the issuing bank, and the banks should make widely available a verification device which would read the cheque, and confirm its genuineness, or some other procedure to achieve the same result.
- 7 For marketing reasons the banks might wish to give these cheques a new name, for example calling them "warrants", to distinguish the new system from the old. But it would be important to ensure that the cheques were understood (and acknowledged by the banks) to be cheques within the meaning of the legislation currently governing cheques and other bills of exchange. This would ensure that there were no doubts about the legal effects of the new cheques, as it would make it clear that the current well-developed system of law continued to apply. Because some features of these cheques would require the support of primary legislation, the opportunity could usefully be taken to remove any doubt that such cheques were subject to the existing cheque legislation.

- 8 Customers could obtain the new cheques over the counter or by post, authorising their issue by signing a paper form, or by newer methods like telephone or internet banking. But because the cheques would bear a digital signature, they could also be sent over the internet for local printing by customers able and willing to use this method. This would enable a customer to produce a cheque almost immediately when required. Because the cheques would be electronic in form, they could be sent by email to the recipient if preferred, and likewise sent by email by the recipient to his bank for collection. A request for the issue of such a cheque could, by arrangement with the issuing bank, be made to require more than one signatory, thus preserving the existing precautions taken by a number of bodies, including especially charities.
- 9 Because the new cheques would be issued by the banks, and their genuineness could be verified easily by anyone, they would not need to be supported by a clearing system – they would in effect be pre-cleared. Recipients would have the issuing bank's guarantee of payment, and should be given immediate value by their own bank. The cheques would be designed to be machine-readable, thus facilitating interbank accounting.
- 10 The inclusion of the recipient's bank account number would be an important safeguard against fraud if a cheque were stolen. In order to obtain value for a stolen cheque, the thief would have to open a bank account in the name of the recipient, as now; but the account would have to have the same number as the one shown on the stolen cheque. This is not remotely likely to happen by chance, and a request for an account to bear a specific number would be highly suspicious. Moreover the bank might well be unable to comply with it even if it were willing to do so (since banking systems are unlikely to be designed to enable account numbers to be chosen at will). To back up this important protection, legislation would be required to provide that a bank which paid a stolen cheque into an account with a number different from the one shown on the cheque should be liable to compensate the true owner for the loss. (This is very similar to the existing rule under which a bank is liable if it pays over the counter the value of a stolen crossed cheque, since banks are required to pay crossed cheques into bank accounts.)
- 11 Recipients of payments would be required to disclose their bank account numbers to payers. Anxiety is sometimes expressed about the risks of such a disclosure. The anxiety is misplaced. Knowledge of a bank account number, even with knowledge of the sort code which identifies the branch at which the account is held, is not enough to enable funds to be withdrawn from the account. Account numbers and sort codes are of course already shown on printed cheque forms, and thus disclosed to recipients of cheque payments, and this has been the case without apparent public anxiety for very many years. (It is true that participants in the direct debit scheme can originate such debits using only the sort code and account number. But participants are admitted to

the scheme by the banks only if the banks trust the participant; and the banks guarantee reimbursement of unauthorised debits.)

- 12 The banks could collaborate to make verification devices that could verify cheques issued by any participating bank, avoiding the need for a multiplicity of devices. Such devices should be made widely available free or at very low cost, since it is in the interests of the banks to have their signatures readily verifiable. In principle mobile phones could be used as verification devices, since many have both the necessary camera and processing power. But mobile phones, like other computers, are susceptible to infection by malicious software, which could cause a phone to verify a bogus cheque as genuine. To exploit this possibility, a payer would have to be able to modify a cheque suitably and also to target the recipient's phone with the necessary malicious software to verify the cheque as genuine. This may in practice be too difficult for criminals to find worthwhile; but recipients of payments, who would suffer the loss, would not usually have the technical skills to protect themselves from the risk or to evaluate it. Another alternative method of verification, for users of the internet, would be for the banks to provide a website which, on entry of a code taken from the cheque, would display the details of the genuine cheque corresponding to that code. Cheques received in electronic form could be verified by the use of software running on the computer where they were received.
- 13 A payer could make multiple copies of a cheque. With this possibility in mind, cheques would bear a unique serial number, and the issuing bank would pay against only one instance of a given cheque. The recipient would not be prejudiced by this, since all the copies would be payable to the same recipient through the same bank account, and the recipient ought not to be expecting payment more than once on the same cheque in any event. Recipients of a series of payments of the same amount, whether on the same or on different dates, would have to take care to check that different serial numbers appeared on what purported to be different cheques. The banks would need to keep a database of presented cheques, to guard against presentation of multiple copies. The check against the database could be seen as a form of clearing, but it would be hugely cheaper than the existing clearing system, since it would require no judgement about the genuineness of handwritten signatures or the availability of funds, and could be performed automatically and within seconds of the cheque being received by the collecting bank. The website suggested above would also enable cheque recipients to make sure that they were receiving a new cheque for a recurring payment, and not the repeat of one already paid.
- 14 Cheques could provide for a future value date, thus enabling credit to be obtained by the payer and security by the recipient. Whether the issuing bank would delay the debit to its customer's account until the value date would depend on the customer's arrangements with its bank, however.

- 15 A cheque would not be paid until presented for payment by the recipient through his own bank. If the customer changed his mind about a transaction before handing over the cheque issued for it, he would want to cancel the cheque and have any debit to his account reversed. But the bank would be liable on the cheque if presented, and because the cheque could exist in multiple copies, it could not effectively be returned to the bank for cancellation.
- 16 The answer to this problem, a new problem arising from the digital nature of the cheque, would be to give the cheques a fairly short standard period of validity (with their expiry date being shown plainly on their face), after which the liability of the issuing bank would be discharged and the debit to the customer reversed automatically. The customer should be free to specify the expiry date when requesting the cheque, since it would be the customer's funds which would be tied up until that date. Unless the customer specified a date, there could be a default date of, say, seven days after the date of issue. A short validity period would no doubt mean that some recipients failed to present their cheques in time. But it should be cheap to replace an expired cheque with a new one. The cost to the bank of issuing such a cheque is basically the same as the cost of making an online payment (or a little more if it is sent by post or issued over the counter), and the charge should be very low.
- 17 If the short validity period were considered a serious drawback, an alternative approach would permit simple cancellation of a new cheque before presentation for payment, much as a paper cheque can be stopped. The consequence would be that the new cheques would not guarantee payment to the recipient. If stopped before presentation, the recipient would be left to enforce payment against the customer by legal proceedings if necessary, as is the case with a stopped paper cheque.
- 18 This result would be achieved by providing for the new cheque to be digitally signed by the issuing bank as agent for a customer named in the cheque. Where a document is signed by an agent of a named principal, it is the principal and not the agent who is liable on it. No funds would be debited on the issue of such a cheque by the bank, but only on its presentation for payment by the recipient's bank. The bank would make its decision whether funds or credit were available at the time of presentation instead of when asked to issue the cheque. Cheques would therefore need to be cleared electronically on presentation, but clearing would be greatly simplified by the fact that genuineness would be checked automatically.
- 19 The only serious drawback of banks signing cheques as agents, without being liable on them, would be the risk that the public would find the cheques misleading. They would be signed by a bank, and the banks' denial of liability on them, on the basis that they were acting only as agents, might seem tricky and evasive.

20      Whichever model were adopted, the new cheques would provide a highly flexible transition for an old and valued method of payment into the new digital world.

© Nicholas Bohm and Jack Lang, 2011

This paper was first published in the Digital Evidence and Electronic Signature Law Review, Vol 8, page 107