The Federal Reserve Board

Remarks by Governor Edward W. Kelley, Jr.

Developments in electronic money and banking
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It is a pleasure to be here this afternoon to provide the Federal Reserve's perspective on recent developments in the field of electronic money and banking. To begin, let me remind you that progress in the retail electronic banking sector so far has been slow in the United States. Twenty years ago, a national Commission was appointed by the Congress to study many of the issues surrounding emerging electronic funds transfer systems, particularly as they were seen to affect consumers and the general public. The assumption at that time was that the use of currency and checks in the United States would rapidly disappear. Indeed, the creation of the Automated Clearing House system and NACHA have their roots in this era of our history. Yet today, paper currency and checks are still used for the overwhelming majority of consumer payments, while electronic transfers, such as those made over the ACH, account for a very small fraction. In contrast, for the major money and securities markets in this country, electronic payments are the rule rather than the exception. Settlements for these markets generate many of the electronic funds transfers over the Federal Reserve's Fedwire system and the New York Clearinghouse CHIPS system, which total more than $2 trillion per day and represent most of the daily dollar value of payments in this country.

With this background in mind, the Federal Reserve has adopted a view toward the development of new electronic money and banking products that emphasizes the need for innovation, particularly in the retail sector, supported by a realistic approach to regulation. It is the private sector that must play the pivotal role in identifying which services consumers and businesses want, and are willing to pay for, in areas such as stored-value -- or "smart" -- cards and payments over the Internet, and in the development of new home-banking products. If the past is any guide, consumer acceptance and use of new payment and banking technologies will grow slowly, and we can be certain that many of the new products will not succeed commercially. But those products that do prove to reduce costs and improve the choices available to consumers and businesses in conducting their economic activities could gain widespread acceptance in the longer term.

Competition in these efforts is healthy, particularly in areas where new technologies must be turned into practical products that, in many cases, will compete with older, established payment methods and delivery channels. Although I would expect that banks will continue to serve as the core of the payment system, non-banking organizations, which traditionally have been active in this field, appear to be contributing to the competitive environment and serving as an impetus to innovation. Heavy-handed, preemptive attempts at regulating these products and the competitive process before significant social risks have been demonstrated would likely handicap innovation for no compelling reason. On the other hand, history also suggests that, if significant problems affecting the economic interests and well-being of a

wide group of our citizens were to arise in the future, there would be a corresponding legislative and regulatory response. While we do not see the need for new substantive regulations at this time, there is an on-going need to review existing regulations and supervisory practices in order to adapt to technological as well as financial innovations, as I will mention later.

Let me now turn to the Federal Reserve's views of the potential impact of retail electronic banking and payments on the three primary central banking functions: monetary policy, banking supervision, and the payment system. In these as well as related areas, such as consumer privacy and industry competition, the policy issues being raised in the current debate about electronic payments are the same as those analyzed in the 1970s by the national EFT Commission. In fact, in many cases the striking parallels give the distinct impression that "we've been here before."

As for the conduct of monetary policy, in hindsight, it may seem surprising that there were concerns at that time about the impact of the ACH. Then as now, the potential impact on monetary policy of new electronic payment products has been greatly exaggerated. As with the use of the ACH, we would not expect that the expansion of electronic delivery of existing banking services will have appreciable effects on the money supply or the money markets. In contrast, "electronic cash" or other new electronic payment products, if successful, could gradually lead to shifts among different forms of money held by consumers and thus potentially affect the behavior of the monetary aggregates. Yet concerns about loss of "control" of the money supply are misdirected. In the last twenty years, major shifts caused by other financial innovations have led to some changes over time in the ways in which monetary policy is formulated, with the monetary aggregates now playing a lesser role. Moreover, financial innovation has not seriously undermined central banks' ability to implement policy, although adaptations have sometimes been called for.

Although growth rates of the money supply are no longer the central focus of monetary policy making, the Federal Reserve still needs to monitor the monetary aggregates carefully in the policy process, and it will remain important that the aggregates accurately measure the various instruments that are being used as money. Accordingly, we do expect to include any significant amounts of new general-purpose payment instruments, such as balances on stored-value cards, in the monetary aggregates, and the Federal Reserve has the statutory authority to require any necessary reports from depository institutions. If new payment instruments were issued by nonbanks, we would expect to obtain voluntary reports from issuers, as we traditionally have done with travelers checks.

Before I move on to the topic of banking supervision, I would like to touch on the question of "seigniorage," a term often used for income that governments generate through issuance of non-interest bearing coin and currency. First, the amount of currency displaced by new payment products relative to the amount outstanding, and the corresponding impact on federal revenues in the near term, is likely to be very small in percentage terms. For example, in a scenario in which every resident of the United States held $150 on a stored-value card or electronic cash account, which I view as highly optimistic over a near-to-medium- term horizon, the total value outstanding would amount to less than $50 billion, or only about 10 percent of the currency stock. Moreover, estimates are that as much as two-thirds of the value of U.S. currency circulates abroad, a market where holders may be even more resistant to giving up Federal Reserve notes for privately issued electronic products. Second, even if there is some erosion of federal revenues due to declining demand for

currency, this should not be a governing factor in public policy toward innovative payment products. Indeed, existing products such as credit and debit cards, along with checking accounts, have probably reduced the use of currency over time relative to what it would otherwise have been, which is a natural outcome of innovation and improvement in banking and payment systems.

Second, banking supervision. While any substantial implications for monetary and fiscal policy are well into the future, new electronic banking services could require changes in the way that banking supervision is conducted in the relatively near term. The Federal Reserve is responsible for examining and assessing the safety and soundness of bank holding companies, state-chartered Federal Reserve member banks, and U.S. branches and agencies of foreign banks. These examinations include a review of institutions' information systems, including security controls and contingency arrangements. Internet-based home banking services, as well as new payment products such as stored- value cards, have the potential to expose institutions to significant liability if security measures were breached for fraudulent or malicious purposes. Of course, institutions have strong incentives to protect themselves against these risks, and early indications are that the more sophisticated are investing considerable resources in doing so.

The Federal Reserve is actively monitoring developments in this area so as to be in a strong position to address any supervisory concerns that may arise. We are reviewing the way that we examine banks' information systems to address developments in electronic banking, among other things. However, banking regulators cannot possibly assess the adequacy of every Internet firewall or smart card. Rather, the role of regulators is to require policies and procedures to be in place within banking organizations to ensure that risks are identified and managed. For example, the Board recently approved the first application of a bank holding company for a subsidiary to engage in data processing activities that support the provision of banking and financial services over the Internet. In this approval order, involving the widely publicized Security First Network Bank, which is offering retail banking services primarily over the Internet, the Board noted that it expects banking organizations considering providing such services to analyze carefully the associated risks and to evaluate whether those risks are consistent with their policies relating to the security of customer information and other data. Of course, banks may first need to assure themselves that their existing information security policies and procedures are adequate for an expanding range of electronic banking activities. I would hope and expect such safety evaluations to be demanded by customers, as well as regulators.

The third main area of central bank responsibility is the payment system. It may be helpful to begin by considering the nature of payment systems and how they might be affected by new electronic payment products. First, all payment systems consist of money and the means of transferring money from one individual or organization to another. New electronic payment methods that can be envisioned do not change this fact, although they may result in different forms of money and new technology for executing transfers. Second, the payment system comprises several main sectors, ranging from large financial institutions that play a major role both as users and providers of many different payment services, to consumers and small businesses that primarily use smaller value payment systems. Of course, the Federal Reserve also plays a unifying role in the payment system as the provider of currency, interbank clearing and settlement services, and, in some cases, regulator.

New electronic payment products, such as stored-value cards and Internet payment services,

are designed primarily to automate the billions of relatively small-value transactions involving consumers and non-financial businesses. The transactions involved are as diverse as the commercial economy of the United States, and the future needs for payment systems, both in traditional face-to-face business and in commerce over open networks such as the Internet, are evolving daily.

While the Federal Reserve's interbank payment services, such as Fedwire and ACH, have been highly automated for years, we are examining areas where we can make use of new technology where appropriate. For example, we are continuing to keep abreast of new developments in areas such as encryption, electronic communications, and data security to ensure that our existing payment systems take full advantage of any improvements. As a side point, I might mention that we are also making use of the Internet to provide public information services; the Reserve Banks and the Board of Governors now maintain home pages on the Internet's World Wide Web, where we provide up-to-date information that may be useful to the general public, such as monetary and economic statistics and Federal Reserve publications.

As I have mentioned on previous occasions, however, I do not anticipate that the Federal Reserve will seek to provide a new retail electronic payment product in this emerging industry. In the 1970s, the Federal Reserve took a central role in developing the ACH system on behalf of the banking industry, and then explicitly subsidized operation of the ACH for some time. Now, twenty years later, circumstances are sufficiently different that we do not believe that a similar approach would be necessary or desirable to advance the efficiency and effectiveness of the payment system. There is no lack of private sector investment in providing new products and new means of delivering services to consumers. Experimentation is needed to determine which products best fit consumers' needs, but history has shown that the private sector, rather than government, is best able to perform this role.

The Federal Reserve is, however, examining ways in which we can support industry initiatives where appropriate. For example, we are currently reviewing our existing interbank net settlement services for check clearinghouses and private ACH operators and considering whether similar services could be provided for other monetary instruments that the banking industry may offer to their customers.

The Federal Reserve also has specific regulatory responsibilities as well as a general interest in the continuing integrity of the payment system. Some have raised concerns that new electronic payment products, such as those that could be used over the Internet or are offered by unregulated entities, could create new avenues for criminal financial activities or threaten the integrity of the payment system. Although the Federal Reserve, as well as other authorities, will be vigilant in monitoring developments, we believe that these concerns are premature. Until new payment products gain widespread acceptance, their usefulness in criminal activities will necessarily be limited. Moreover, the measures that prudent institutions will impose to limit the security risks in offering new products, such as relatively low monetary limits and transaction record keeping where practical, will also limit their impact on the payment system more broadly. Of course, if these instruments were to spread more quickly than expected and were provided by organizations that did not have due regard for the safety of funds entrusted to them, concerns would be greater, as would the likelihood of regulatory actions. But we do not see this prospect on the horizon at this stage.

We have focused attention recently on modernizing existing regulations in the context of our regulatory planning and review process as well as clarifying how they apply to new technologies; these efforts should serve to reduce any latent regulatory barriers or uncertainty that might hinder development of electronic payment products and services. For example, the Board recently adopted changes to Regulation E that would permit consumers to provide appropriate electronic authorization for electronic funds transfers, in place of a written signature. We have also proposed additional changes to Regulation E under which required information, such as certain notices and disclosures, could be transmitted electronically, for example, in home banking systems.

As you probably know, the Federal Reserve Board also recently issued a request for public comment on the treatment of stored-value cards under the Electronic Fund Transfer Act and Regulation E. The proposal would exempt many stored-value cards from Regulation E provisions, such as liability limits for unauthorized transfers, error resolution procedures, and printed receipts and account statements. Cards with maximum balances of less than $100 would be wholly exempt, while issuers of most larger-value cards would need to disclose the terms and conditions of the cards to customers, a practice that would be prudent for any new product. I hope industry participants as well as potential users will provide comments to help us refine the proposal over the coming months and ensure that it provides the appropriate level of consumer protection without unnecessary and costly regulatory burdens or undesirable incentives.

History has shown that technological innovations can provide widespread benefits across society. The Federal Reserve welcomes private-sector investment and innovation to improve efficiency and effectiveness in all areas of banking and payments activities, while at the same time preserving the safety and soundness of the financial system. We are always open to discussions and suggestions from the industry in this respect and on any other issues involving emerging money and banking products. This is the strategy I expect we will pursue as experience with new electronic money and banking products unfolds over the next few years.

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