

Regulating Electronic Money

by Alan Greenspan

You have heard many points of view today on electronic money and banking. New products are being designed to challenge the use of currency and checks in millions of routine consumer transactions. Other new systems may allow payments or banking instructions to be sent over networks such as the Internet, which is unprecedented in providing versatile, low-cost communication capabilities. Again, as in the 1970s, articles are being written and conferences are being held to pronounce the end of paper. They may again prove premature.

The payment systems of the United States present a paradox. Our systems and banking arrangements for handling high-value dollar payments are all electronic and have been for many years. Banking records, including those for loans and deposits, have been computerized since the 1960s. Securities markets also now rely on highly automated records and systems, born out of necessity following the paperwork crisis of the 1970s.

Yet in transactions initiated by consumers, paper—currency and checks—remains the payment system of choice. Debit and ATM cards, along with Automated Clearing House payments, account for a very small percentage of transactions. Even the use of popular credit cards has only recently begun to challenge paper's dominance.

Brand names used for many new electronic payment products are designed to suggest analogies to paper currency and coins. It is not surprising, therefore, that they some-

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Former representative Tim Penny (right) discusses the *Cato Handbook for Congress* with Sen. Sam Brownback (R-Kans.) at a Capitol Hill press conference, p. 3.

times evoke comparisons with an earlier period in U.S. history when private currencies circulated widely. We should, of course, recognize the limitations of that particular experience for drawing policy conclusions relevant to the present. Many of the new electronic payment products are more similar to conventional products, such as debit cards, than to currency. And certainly, the U.S. financial system has evolved considerably since the era of private currency. Thus the baseline from which innovation and experimentation are occurring is undoubtedly different today. Nonetheless, evaluations of that period can clearly add to our perspective.

Insights from the Free Banking Era

Throughout much of the 19th century, privately issued bank notes were an important form of money in our economy. In the pre-Civil War period, in particular, the federal government did not supply a significant

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portion of the nation's currency. The charter of the Bank of the United States had not been renewed, and there was no central banking organization to help regulate the supply of currency. Notes issued by state-chartered banks were a major part of the money supply. That was a result, in large part, of the “free banking” movement during a period when state chartering restrictions on banks were significantly loosened. Free banking dominated the landscape in most of the states in the Union starting in the 1830s and lasted until the National Banking Act was adopted in 1863.

The free banking period was a controversial one in U.S. history. The traditional view has been that that period gave rise to “wildcat banking,” in which banks were cre-

ated simply to issue worthless notes to an unsuspecting public who would seek in vain among the “wildcats” for redemption in specie. Nonpar clearing of bank notes, along with suspension of specie payments by banks and outright defaults, did lead to risks and inefficiencies.

Recently, some scholars have suggested that the problems of the free banking period were exaggerated. Retrospective analyses have shown, for example, that losses to bank note holders and bank failures were not out of line with those in other comparable periods in U.S. banking history.

The newer research also suggests that, to a degree, the problems of free banking had little to do with banking. In particular, although free banking laws varied considerably by state, issuers of bank notes were often required to purchase state government bonds to back

the notes they issued. In some cases, those securities were valued at par rather than at market prices—a structure that evidently did foster wildcat banking. Moreover, no matter what the regulatory valuation scheme, when the state government ran into financial problems, as many often did, both the bonds and the bank notes sank in value. In some cases, that contributed to bank failures.

In the pre-Civil War period, when the general ethos of laissez faire severely discouraged government intervention in the market economy, private regulations arose in the form of a variety of institutions, which accomplished much of what we endeavor to do today with our elaborate system of government rulemaking and supervision. In particular, scholars have noted that the period saw the development of private measures to

Cato Calendar

Regulation in the Digital Age

Cosponsored with the Brookings Institution

Washington • Capital Hilton • April 17-18, 1997

Speakers include George Gilder, Louis Rossetto, Richard Wiley, Joel Hyatt, Peter Pitsch, Lawrence Gasman, Thomas Mann, and William Niskanen.

Twentieth Anniversary Gala

Washington • Washington Hilton • May 1, 1997

Speakers include Steve Forbes, Fred Smith, Nat Hentoff, José Piñera, and P. J. O'Rourke.

China as a Global Economic Power: Market Reforms in the New Millennium

Shanghai • Shanghai Hilton • June 15-18, 1997

Speakers include Wu Jie, Fan Gang, William Overholt, William McGurn, José Piñera, Kate Xiao Zhou, Roger Pilon, and Richard Wong.

NATO Enlargement: Illusions and Reality

Washington • Cato Institute • June 25, 1997

Speakers include Sen. Kay Bailey Hutchison, Susan Eisenhower, Ronald Steel, James Chace, and Fred Iklé.

Beyond the Telecommunications Act of 1996

Washington • Cato Institute • September 12, 1997

Atlas and the World: The 40th Anniversary Celebration of Ayn Rand's *Atlas Shrugged*

Cosponsored with the Institute for Objectivist Studies

Washington • Capital Hilton • October 4, 1997

Speakers include David Kelley, John Stossel, Ed Snider, John Aglialaro, Robert Poole, Edward Hudgins, and Rep. Chris Cox.

Money and Capital Flows in a Global Economy Fifteenth Annual Monetary Conference

Washington • Cato Institute • October 16, 1997

“To develop new forms of payment, the private sector will need the flexibility to experiment, without broad interference by the government.”

help holders of bank notes protect themselves from risk. As the notes were not legal tender, there was no obligation to accept the currency of a suspect bank, or to accept it at par value; accordingly, notes often were accepted and cleared at less than par. As a result, publications—bank note reporters—were established to provide current information on market rates for notes of different banks based on their creditworthiness, reputation, and location, as well as to identify counterfeit notes. Bank note brokers created a ready market for notes of different credit quality. In some areas, private clearinghouses were established, which provided incentives for self-regulation.

Banks competed for reputation and advertised high capital ratios to attract depositors. Capital-to-asset ratios in those days often exceeded one-third. One must keep in mind

that then, as now, a significant part of safety and soundness regulations came from market forces and institutions. Government regulation is an add-on that tries to identify presumed market failures and, accordingly, create official rules to fill in the gaps.

To be sure, much of what developed in that earlier period was primitive and often ineffectual. But the financial system itself was just beginning to evolve.

Reliance on Private Market Self-Regulation

Today's presumably far more sophisticated view of such matters may lead us to look askance at what we have often dismissed as “wildcat banking.” But it should not escape our notice that, as the international financial system becomes ever more complex, we, in our regulatory roles, are being driven increasingly toward reliance on private mar-

ket self-regulation similar to what emerged in more primitive forms in the 1850s in the United States.

As I have said many times in the past, to continue to be effective, government's regulatory role must increasingly ensure that effective risk management systems are in place in the private sector. As financial systems have become more complex, detailed rules and standards have become both burdensome and ineffective, if not counterproductive. If we wish to foster financial innovation, we must be careful not to impose rules that inhibit it. I am especially concerned that we not attempt to impede unduly our newest innovation, electronic money, or more generally, our increasingly broad electronic payments system.

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Cato Studies

The Growth Effects of Social Security Privatization

In the new Cato study “Privatizing Social Security: The \$10 Trillion Opportunity” (Social Security Paper no. 7), Martin Feldstein, professor of economics at Harvard University and president of the National Bureau of Economic Research, argues that privatization would spur economic growth. Under the current unfunded Social Security system, each generation loses the difference between the return to real capital that would be obtained in a funded system and the much lower return that is achieved now. Shifting to a privatized system would permit individuals to obtain the full pretax rate of return on capital, thus creating a larger capital stock and a higher national income. “Although the transition to a funded system would involve economic as well as political costs,” Feldstein concludes, “the net present value of the gain would be enormous—as much as \$10 trillion to \$20 trillion.”

◆Don't Let the Government Invest

The looming insolvency of the Social Secu-

rity system has led people to search for solutions. One that has been proposed, notably by six members of the Social Security Advisory Council, is to allow the federal government to invest money from the Social Security trust fund in booming private capital markets. Krzysztof M. Ostaszewski, director of the Actuarial Program at the University of Louisville, argues in the new Cato paper, “Privatizing the Social Security Trust Fund? Don't Let the Government Invest” (Social Security Paper no. 6), that such a move would have terrible consequences. If the federal government were to invest trust fund dollars in private capital markets, it would become the nation's largest shareholder, with a controlling interest in nearly every American company. That, Ostaszewski argues, would threaten American competitiveness. A much better approach, he maintains, would be to truly privatize Social Security. A system of individual private investment accounts, like that in Chile, would allow people to benefit from higher market returns without risking increased government involvement in the economy.

◆Derailing Amtrak

In 1970 Congress created Amtrak as a publicly owned for-profit company. Twenty-five years later, however, Amtrak remains heavily dependent on government subsidy. In a new Cato Institute study titled “Amtrak at Twenty-Five: End of the Line for Taxpayer Subsidies” (Policy Analysis no. 266), Stephen Moore, director of fiscal policy studies at the Cato Institute, and economic consultants Wendell Cox and Jean Love argue that it is time to end taxpayer support of Amtrak. The authors maintain that Amtrak makes a negligible contribution to the nation's transportation system; its typical riders are not low-income Americans; it has virtually no impact on reducing traffic congestion, pollution, and energy use; and it is by far the most highly subsidized form of intercity transportation. “For 25 years,” they conclude, “Amtrak supporters have promised that self-sufficiency is ‘just around the corner.’ Now is the time for Amtrak to turn that corner.”

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“When the general ethos of laissez faire discouraged government intervention into the economy, private regulation arose to accomplish much of what we endeavor to do with our elaborate system of government rulemaking.”

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The Flexibility to Experiment

To develop new forms of payment, the private sector will need the flexibility to experiment, without broad interference by the government. The history of the Automated Clearing House provides a useful caution. The Federal Reserve, in partnership with the banking industry, has taken a leading role in developing the ACH system for more than 20 years. It was the advent of the ACH that led many economists to discuss money in a “cashless society.” Although the ACH has allowed the automation of some important types of payments, it has never been widely used by consumers.

That experience suggests that creating new technology and providing an interbank electronic clearing system were easy. But developing electronic payment products based on that technology, which were more convenient and cost-effective than paper, from the standpoint of both consumers and merchants, turned out to be difficult. In our enthusiasm for new electronic payment systems, we significantly underestimated the convenience of paper for consumers and especially the cost and difficulty of building a broad-based infrastructure to support new electronic payment systems. It is also possible that efforts by the government to choose and support a single technology—the ACH in this case—may have slowed efforts by the private sector to develop alternative technologies.

In the current period of change and market uncertainty, there may be a natural temptation for us—and a natural desire on the part of some market participants—to have the government step in and resolve the uncertainty, through standards, regulation, or other government policies. In the case of electronic money and banking, the lesson from the ACH is that consumers and merchants, not governments, will ultimately determine what new products are successful in the marketplace. Government action can retard progress but almost certainly cannot ensure it.

Before we set in stone a series of rules for the emerging new medium, let us recall that, across many industries in the economy, forecasting the particular direction of innovation has proven to be especially precarious

over the generations. As Professor Nathan Rosenberg of Stanford has pointed out, even relatively mature technologies can develop in wholly unanticipated ways.

Our optimum financial system is one of free and broad competition that is presumed to calibrate appropriately the changing value of products to consumers so that the risk-adjusted rate of return on equity measures success in providing what people want to buy.

That has turned out to be broadly true in practice and supplied regulators with some sense of which products were serving consumers most effectively. That signal may not be so readily evident in the case of electronic money. The problem is seigniorage, that is, the income one obtains from being able to induce market participants to employ one's liabilities as a money. Such income reflects the return on interest-bearing assets that are financed by the issuance of currency, which pays no interest, or at most a below-market rate, to the holder.

Historically, when private currency was widespread, banks garnered seigniorage profits. Seigniorage increasingly shifted to the federal government after passage of the National Bank Act, when the federal government imposed federal regulation on bank note issuance, taxed state bank notes, and ultimately became the sole issuer of currency.

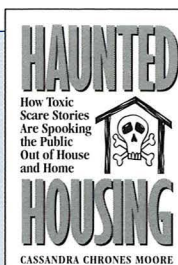
Today, there continue to be incentives for private businesses to recapture seigniorage from the federal government. Seigniorage profits are likely to be part of the business calculation for issuers of prepaid payment instruments, such as prepaid cards, as well as for traditional instruments like travelers' checks. As a result, in the short term, it may

be difficult for us to determine whether profitable and popular new products are actually efficient alternatives to official paper currency or simply a diversion of seigniorage from the government to the private sector. Yet we must also recognize that a diversion of seigniorage may be an inevitable byproduct of creating a more efficient retail payment system in the long run.

Conclusion

The innovations being discussed today can be viewed from a perspective very different from that afforded by the financial system of the 1850s. Unlike the situation in the 19th century, today we have a well-developed and tested set of monetary and payment arrangements and a strong national currency. Yet, as in the earlier period, industry participants may find that self-policing is in their best interest. We could envisage proposals in the near future that issuers of electronic payment obligations, such as stored-value cards or “digital cash,” set up specialized issuing corporations with strong balance sheets and public credit ratings. Such structures have been common in other areas, for example, in the derivatives and commercial paper markets.

In conclusion, electronic money is likely to spread only gradually and play a much smaller role in our economy than private currency did historically. Nonetheless, the earlier period affords certain insights into the way markets behaved when government rules were much less pervasive. Those insights, I submit, should be considered very carefully as we endeavor to understand and engage the new private currency markets of the 21st century. ■



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