
The Future of Money and Financial Privacy

Richard W. Rahn

People do not want money—what they want is the ability to acquire goods and services. Money is only useful as a means to facilitate trade. Fortunately, new technologies will enable people to acquire the goods they want without holding or handling cash, which is a troublesome, nonearning asset. In the future, trade will be executed by instantaneous and simultaneous debiting and crediting of liquid-wealth accounts, held by both banking and nonbanking institutions. The new electronic digital-payments technology will enable property-rights claims on real assets, such as stock and bond funds, or gold, to be utilized as the medium of exchange for virtually all transactions.

In sum, when businesses or individuals wish to purchase a good or service, they will provide an electronic instruction, directly or indirectly, to their bank or other financial intermediary. The instruction will state that an amount equal to the nominal value of the purchase should be transferred immediately (with no time lag) to the account of the seller of the good or service. As a result, there will be no loss of interest earned, nor will there be any need for a traditional wholesale interbank clearing system. The buyer and seller will have transferred wealth almost instantaneously and without risk of nonpayment. By avoiding the use of government-produced fiat money, with all of its uncertainty and instability, some of the curse of inflation and payment insecurity that plague the world will disappear.

Conventional money will disappear because it is costly and cumbersome. Paper currency and coins can easily be lost or stolen. Conventional money is also bulky to transport and time-consuming to use in business transactions. It requires merchants to keep a monetary “inventory” in order to make change. (When used to buy merchandise from machines, such as a soda vending machine, costly coin- and bill-handling mechanisms must be

installed. These mechanisms are subject to frequent mechanical breakdown and theft from both employees and outsiders.) All of this “inventory” of currency and coins is at risk and does not earn its owners any return.

A glorious age is beginning in which people will not have to endure episodes of sustained inflation. People can have a choice of both government-issued and privately-issued monies, which will enable them to escape from unstable money. If a governmental central bank, such as the US Federal Reserve Bank, engages in inflationary monetary policy, users of its money will switch to a different currency or will hold other assets. People will still be forced to use government money for the payment of taxes and for the receipt of payments from government; but for private transactions people will increasingly move away from government money.¹ Governments that produce money with a stable value (little or no inflation) will find their money may be used as a unit of account and medium of settlement, even though it may not be used as a store of value or a medium of exchange.

There are a series of technological and regulatory changes underway that will eventually make privately-issued digital (electronic) money the norm. These changes will alleviate the many problems experienced with conventional central-bank-issued money, and particularly with paper currency and coins, which were noted above.

If people could avoid holding any (non-interest-bearing) currency or coins at all, and still have the same, or greater, ease and ability to spend, they would probably choose to do so. Further, if people could keep their assets in a form where they make higher rather than lower rates of return, commensurate with the level of risk they are willing to accept, they probably would choose to do so. Finally, if they could take their liquid assets, such as stock portfolios, and their illiquid assets, such as homes, and turn part of their value into money only at the moment of purchase of some good or service, they would also probably choose to do that.

In fact, people soon will be able to do all of the above. Many business firms and some individuals are already partially turning their assets into money only at the moment they need to make

an expenditure. They do this by obtaining a line of credit from the bank, using their assets as collateral. When they need to purchase something, they write a check or have an electronic transfer made against the line of credit. In this case, the bank credit performs many of the functions of money. It makes economic sense for the business to operate in this way when the rate of return it receives on its assets is greater than the cost of the line of credit from the bank.

Debit cards often are issued against interest-bearing accounts. Smart cards, which combine the capabilities of a prepaid and debit card, can also be interest bearing. (This is only true with some smart-card systems; it is not necessarily applicable to those systems that allow anonymous card-to-card transfers.) Almost all electronic money will be interest bearing. Therefore, central-bank money almost certainly will decline in importance because of its lack of competitiveness.

What is most likely to develop is that the primary issuers of electronic money in the future will be mutual funds. Mutual funds, by having diverse and liquid assets, can offer less risk than traditional banks. With a mutual fund, holders can cash in all or part of their ownership at any time, but not at a fixed price. Thus the mutual-fund account is as liquid as a demand-account deposit at a bank. (There are some exceptions, such as a “hedge fund”—in which the participants cannot withdraw their capital or capital obligation before a specified time or only with permission of the fund management.) In some countries, mutual-fund shareholders already can write checks and request electronic transfers to third parties against their share balance.

Mutual funds also have the advantage that they are not subject to bank runs resulting from a loss of confidence in the bank. A bank can find itself in a position where the obligations to depositors are greater than the assets of the bank. Given that bank deposits have a par value, the first people in the withdrawal queue receive 100 percent of their deposits, and the ones left in the queue after the bank’s funds run out get nothing if there is no deposit insurance, or get their funds only after a long wait if deposit insurance exists.

Under the mutual fund, increases and decreases in share values in the underlying securities portfolio of the fund are distributed (actually, “marked to market”) on an equal pro-rata basis to all of the holders of the fund. The value of the fund may decline, and so each fund holder shares the same percentage decline, as contrasted with the bank deposit “all or nothing” par-value system. What this means is that a holder of a mutual-fund share has more risk than a holder of an insured bank account, but this risk is offset by the greater returns the mutual-fund holder normally receives. So-called money-market mutual funds (which hold highly-rated government and corporate debt obligations) are available for those seeking little risk but still higher returns than normal demand accounts.

Another major financial innovation that will accelerate the movement to nongovernmental money is securitization. This is the process by which previously illiquid assets are made liquid. An example of securitization would be a financial company that pools a group of loans and then sells claims on these loans to borrowers. In the United States, organizations like Fannie Mae pool home mortgages and sell them to financial institutions, mutual funds, and wealthy individuals. An increasingly-wide variety of assets are now securitized. For instance, the expected stream of royalties from singer David Bowie’s recordings have been securitized. In theory, virtually all marketable assets could be securitized. In sum, the new electronic-payment technologies allow holders of assets to earn interest or other returns on these assets up to the moment when they transfer the ownership of a portion of the assets to pay for a good or service.

As more “money” becomes interest-bearing electronic money, there is less risk of inflation because there exists no incentive for private banks or other financial institutions to overissue interest-bearing currency, since it increases the institutions’ own liabilities. (This is because the issuance of interest-bearing “money” makes the issuer not only liable for the principal, but also for the interest. Governments producing non-interest-bearing money, such as currency, do not have this liability for the interest, and therefore in the first order they

seem to be getting something for nothing. Thus, there is an incentive for the government to produce more non-interest-bearing currency than they would otherwise.) The unit of account (*e.g.* the US dollar) will probably continue to be set by the central bank, even though the use of government money as a transaction medium will decline. But the government will only be able to hold on to its function of establishing a unit of account if it operates in a noninflationary or deflationary manner.

Governments increasingly are being disciplined by the market because, in the age of instant global communications and financial institutions, any increase in inflation immediately causes a capital and currency flight. The Asian financial crisis of 1997 is a good example of how rapidly capital can move from an economy once investors lose faith in a government. Capital flight has a strong negative effect on the real economy, which then causes a political backlash.

Governments increasingly have to compete with other governments and private providers of monetary numeraires (*e.g.* the US dollar, Japanese yen, British pound, Swiss franc). Eventually, some governments probably will define their currencies' value explicitly in the form of a tradable basket of goods and services. Commodities traded on organized commodity-futures exchanges, having one world price, are prime candidates. For example, the dollar might be defined as x amount of gold, plus y amount of crude oil, plus z amount of corn. This would be nothing more than a modern version of the gold standard, but the basket will be one which more clearly reflects what the world both produces and consumes, and whose characteristics are easily measured—metals, agricultural products, energy products, and even such things as insurance rates.

The Federal Reserve Board under Chairman Alan Greenspan is known to have implicitly followed sensitive commodity prices, such as gold and oil, in the determination of US monetary policy. When the Fed deviated from this policy in 1998, by letting the price of the “basket” of sensitive commodity prices fall, including gold in dollar terms, it was forced to play “catch up.”² These implicit rules most likely will become more explicit over time.

If governments fail to develop explicit definitions for the value of their currencies, the private sector will. Commodity and securities indexes that are presently traded are a step in the direction of producing definitions that could serve the unit-of-account function of money.

In the economy of the future, most wealth will become both divisible and liquid, and instantaneously transferable, and hence will be usable as transactions media. Since there will be no need to withdraw wealth-producing assets to provide purchasing power, as in a monetary economy, and assuming the unit of account is defined by a specific additive quantity of goods and services, there will be no pressures to produce inflation or deflation. All of the requirements to facilitate trade will still be met, and improved upon.

In this new digital world, transaction costs will be sharply reduced, leading to higher income levels for the world's people. Now that the technological problems have been solved, the speed at which people acquire the benefits of the nonmonetary economy will depend largely on how fast governments get out of the way. The new technologies will not be widely accepted unless people believe they are secure in their transactions, and know that they have the financial privacy and anonymity that cash now provides. This means that governments will need to abolish their controls on encryption (which cannot be enforced anyway) and get away from the notion that they have a right to monitor people's spending and investing behavior.

In a world largely without "money," the notion of money laundering as a crime becomes absurd. Tax evasion and such other criminal activities as drug dealing are the real crimes (if society chooses to outlaw them), not the use of money from these activities. Trying to monitor these crimes by monitoring the use of money is difficult, and harmful for the efficiency of money. New technology increases the difficulty of monitoring, so other less-destructive and more-direct means of fighting crime should be developed. The fact is, whether well-intentioned or ill-intentioned, government policymakers and bureaucrats who defend the encryption controls and money-laundering statutes are

denying the peoples of the world better living standards and a higher level of freedom.

Financial privacy is about the ability, and what many consider the right, to keep confidential the facts concerning one's income, expenditures, investments, and wealth. Without financial privacy, many other fundamental freedoms, such as freedom of religion and speech, are endangered. Invasions of financial privacy are common characteristics of virtually all abusive governments. In the digital age, the government can attempt to have a detailed record of every financial transaction and of everyone's complete financial status, or it can accept the reality that it will know only what people want it to know.

Government officials around the world have provided a number of rationalizations to justify their intrusions into the financial privacy of citizens. These rationalizations can be put into two broad categories:

- the need to obtain private financial information in order to insure payment of all taxes due; and
- the need for law-enforcement agencies to have access to private financial information in order to detect and prosecute drug dealers, terrorists, spies, kidnappers, money launderers, and other assorted reprehensible folk.

In addition, governments have found a profitable side-business of selling data about their citizens—such as information about their automobiles and driving practices—to commercial companies. These companies in turn sell the data as market intelligence and research to vendors of goods and services.

Under totalitarian regimes, free speech and a free press are prohibited. Those who write and speak about things the state does not like are branded as criminals, and punished. As technology changes, however, it becomes increasingly difficult for state authorities to regulate what is published and what people hear.

Economic development has come to depend on the wide dissemination of information. The tools of dissemination—the

printed word, radio and television, telephones, movies, and most recently the Internet—have become cheaper and cheaper, and therefore far more available, leaving residual totalitarian regimes in a dilemma. They need to allow their populations to have access to the information-dissemination tools if their economies are going to improve, but these same tools can be used to receive and transmit politically-prohibited ideas.

If people have computers with printers and modems, copying machines, telephones, radios, and televisions, how can anyone long prevent them from using these devices for nonapproved political communication? The short answer is that no one can.

The reason that free-market democracy largely has triumphed around the globe is, despite its imperfections, it works far better than any alternative economic system. More people benefit in more ways, and fewer are abused under free-market democratic capitalism. When government allows it to properly function, capitalism delivers both the goods and liberty. The same cannot be said of activities managed by government. Over time, governments tend to devolve into inefficient bureaucratic tyrannies.

The greatest threat to future prosperity and liberty comes not from business and the private sector, but from government. The world's people will be neither truly prosperous nor free unless governments retreat from their seemingly never-ending desire to control the production and use of money.

Digital technology enables people to do for themselves what governments attempted to do in the past. The computer, global communications, and the Internet are destroying governments' monopolies on information and money. A person with an inexpensive device able to access the Internet can learn practically anything that is known by just about anyone. Almost any individual or institution that has an asset that can be securitized will soon be able to create financial instruments that can provide most of the functions of money.

A major and growing portion of foreign trade is in services—financial services (such as banking and insurance), business services, engineering and architectural services, legal services, etc. Many of these services can be provided over the Internet,

and hence the providers can be located almost anywhere in the world. Many service providers can easily move their places of business to jurisdictions that have a favorable tax and regulatory environment. Free trade in services increasingly will become a necessity, because governments will find they can neither regulate nor tax such transactions, because consumers will receive much of the “product” by way of the Internet in digitally-encrypted form. Governments that fail to move to free trade in services will find they are faced with the digital equivalent of trying to sweep back the sea.

Any country with a tax code that has high marginal tax rates on labor and capital, particularly financial capital, will see its tax base shrink, as people increasingly seek and acquire goods and services abroad and invest in low-tax jurisdictions through the Internet. For instance, if a person wishes to hire someone to write computer software, he may consider competent professionals anywhere in the world, because the instructions, work output, and payment can be transferred over the Internet. Professionals living in high-tax jurisdictions either will have to reduce their hourly wages or forgo the opportunity for the work. Purchasers of software are interested in getting the best product for the lowest delivered after-tax price. Many professional software writers may choose not to pay income tax to their governments when their clients are in foreign countries.

Tax evasion will be easier since they will be able to send their products over the Internet in encrypted fashion; hence, the government will not know of the untaxed export, and the seller can instruct the purchaser to make payment to the seller’s account in a no-tax jurisdiction.

Holders of financial capital (*i.e.* stocks and bonds, currency, gold, etc.) also will find it increasingly easy to move their portfolios to low-tax jurisdictions. Again, they will do this in an encrypted format so that their own government will not know where the capital has ultimately gone. When tax evasion becomes this easy, like the purchase of whisky in a 1920s speak-easy, many currently law-abiding citizens will find the temptation too great to resist.

The correct response from governments to these new temptations will be to redesign their tax systems. High-marginal-rate tax systems are destructive to economic growth to begin with, and they do not maximize tax revenue. The taxation of capital is particularly destructive, because it has the same effect as eating the “seed corn.” Most capital has been taxed at least once—when it was first earned—if not again thereafter. Taxation of capital reduces the amount available for new investment, yet capital is what increases productivity and creates new jobs. The fact that people will have the ability to avoid destructive taxation is a net plus to economic growth, opportunity, and freedom.

Governments that do not modify their tax systems, but try to respond to the new technologies by so-called tougher enforcement, will succeed only in criminalizing the actions of a much larger portion of their populations, while at the same time reducing economic growth and freedom.

Benign governments will face the digital age by legalizing financial privacy, redesigning their tax systems, and shrinking their own economic and social roles. Oppressive governments will face the digital age by attempting to abolish financial privacy, and then drown in a sea of corruption and disrespect.

Privacy is a precious commodity. People should be able to live their lives largely as they see fit, provided they do not impinge on the rights of others. As Justice Louis Brandeis said, the makers of the Constitution “conferred, as against the government, the right to be let alone—the most comprehensive of rights and the right most valued by civilized men.”

Most people do not want to have total privacy about their financial affairs because without some disclosure it becomes almost impossible to obtain credit. There is no right to credit; it is a privilege. To obtain it, people must convince someone that they have both the means and the honest intention to pay back the money that is lent to them. Usually the reason that people are unable to obtain credit is because they have a poor history of repayment or no credit history at all. Young people frequently are unable to get credit because they have no payment history, a

“Catch 22.” People have been taught to borrow some money or apply for a credit card, even if they do not need it at the time, in order to establish a payment history—which is still good advice. Indeed, in the current economy, those who think they have no need for credit find that it is difficult to rent a car or make a hotel or airline reservation without a credit card.

But while most people voluntarily give up some financial privacy in order to obtain credit, this voluntary act should not imply that their rights to privacy about anything other than what they have freely chosen to disclose should be abridged. As debit cards and smart cards become more widespread, this problem should be partially remedied. But the fact remains, those who choose not to use some form of bank card will find it difficult to make certain types of purchases.

Businesses have an interest in knowing the buying habits of customers, as well as their credit ratings. This legitimate commercial need has spawned a huge data-collection business. Data-collection companies acquire records of virtually any purchase made with a check, debit or credit card. Magazine publishers sell their subscription lists, a practice that has now spread to most other forms of commerce where potential-customer lists are useful. For example, when a person makes a purchase at the local garden shop, he can almost be assured the shop will sell his name and address to the seed-catalog companies.

Much of this is to the consumer’s advantage, because it enables vendors to target their promotions to customers with particular interests. That in turn makes it easier for those with particular interests to obtain information about products they may wish to purchase, because the vendors know who is likely to want to receive specific product information. One only can be assured that information about a purchase will not be recorded and sold if it is paid for in cash and no personal information is provided to the seller.

Even though most purchase and credit reporting is inoffensive or even desirable, abuses take place. Everyone is bombarded by targeted telephone solicitations. In far worse cases of abuse,

identities are stolen, and incorrect information gets into data banks, which can do great harm.

The promise that cyberpayments and smart-card systems hold for legitimate business transactions is immense. It would be a very sad fate if the implementation and widespread use of such systems were impeded in a fruitless attempt to regulate against the possibility that criminals would also use such systems. Although there is a possibility that criminals would exploit these same systems to their advantage, there is no reasonable way to prevent this without the wholesale destruction of the beneficial uses of new technologies.

Consider, for instance, the Justice Department's proposal in 1999 to get the US Congress to pass the Cyberspace Electronic Security Act, which would have granted it authority to break into individuals' home or office computers in order to collect private information, including e-mail. The Justice Department argued it needed this authority to combat drug trafficking, terrorism, white-collar crime, and child pornography. If Congress had passed the proposal, the government would have been able to obtain a great deal of information people believe to be protected and private. It might even have proved useful in prosecuting some guilty individuals. But any criminals who might have been caught would necessarily have been the small fish, because those engaged in serious crime could use any number of techniques to warn them that their computers' security had been breached. They would then have been able to foil the government's data-collection plans.

While the proposed legislation stated the Justice Department's well-meaning intentions, it is worth remembering that those who would have been involved in the everyday execution of the searches might have been the same officials who were sworn to protect the FBI files that ended up in the White House political office; or those at the IRS who were sworn to protect citizens' income-tax returns. The fact is that government, like all sectors of society, has its share of bad apples.

In 1998, the US government had 932 convictions for money laundering. These convictions cost a few billion dollars directly,

and their enforcement cost on the financial system runs in the hundreds of billions of dollars. This is an enormous burden for banks and others to do all the kinds of record keeping and spying on their customers that the Financial Crimes Enforcement Network requires. Any kind of reasonable cost-benefit analysis will show it to be absurd. The costs run clearly into the tens of millions of dollars per conviction.

And for all the well-meaning intentions of those in government seeking to fight crime, the fact is that crime would be reduced by *ending* government's opposition to the coming digital age. The overmonitoring of paper transactions enshrined in our money-laundering statutes, though designed to thwart crime, instead help feed it.

If one truly were interested in greatly reducing crime, it would make sense to move totally to digital money, and give up paper money altogether. But the only way to do this is through anonymous digital money. A large portion of all crime occurs when criminals try to steal someone else's paper currency. Almost all robberies, and most larceny thefts, take place as a result of criminals attempting to steal cash. Approximately 18,000 murders are committed in the US each year, a significant number of which are motivated by the desire to steal cash, and hundreds of thousands of people are severely injured each year as a result of theft attempts. These crimes would be sharply reduced if there were little or no cash to steal. Criminals steal wallets, hold up convenience stores and gas station attendants, and rob banks to get cash. No cash equals less crime. Digital money could quickly largely replace cash if people were assured of the same degree of anonymity they have with paper currency.

Many in government wish to squelch the developments of the new digital age, either because they fear the loss of their own roles as economic gatekeepers, or because they genuinely believe that the new technologies will make life easier for drug dealers, money launderers, and other assorted criminals. To be sure, these technologies do make a criminal's life easier—as do the telephone and automobile. Yet it is also true that the digital age has given law enforcement many more tools to observe and

detect criminal activity. Law-enforcement officials must learn to adapt new technologies to their purposes, rather than outlaw them in the futile hope that they will simply go away.

As the digital revolution takes hold, laws that were written for another era will become increasingly difficult to enforce. Americans and citizens of other countries can choose either to jettison these laws and take advantage of new technologies and the opportunities they create, or keep the laws and pay the price in economic inefficiency, technological backwardness, and government intrusiveness.

Notes

¹ Those who use money-like instruments other than the legal tender of their own government may be subject to capital-gains liabilities, which in turn may slow the movement away from government money.

² The Fed attempted to increase the supply of dollars through interest-rate reductions in order to stop the commodity-price deflation. Given that commodity prices are flexible and wages are far less so, when commodity prices drop, the ratio between wages and prices increases, thus causing an apparent rise in wages. This apparently-rapid increase in the relative price of labor causes businesses to slow hiring or engage in layoffs, which in turn slows or even reverses economic growth. Thus, deflation can be as harmful to economic growth as inflation, because both cause unanticipated changes in relative prices and distort the price signals the economy needs to operate efficiently. In the digital world, private producers of monetary numeraires will gain acceptance for their products if the producers of government monies fail to maintain constant measures of purchasing power—that is, if they allow their money to either “inflate” or “deflate.”