MONEY AND HOW TO PRIVATISE IT:

AN INTRODUCTION

RODERICK MOORE

The Minister who makes the hair rise on the back of our spine and reach into our pockets for a clove of garlic is the Minister for deregulation, the hon. Member for Tatton (Mr. Hamilton). He has wisely not been allowed to speak in the debate until after the 9 pm watershed, in case he frightens young strangers. May I make a confession: I have a sneaking respect for the hon. Gentleman, based on the fact that I know where he stands. Usually so many miles to the right he is visible only on a clear day.

How did the Minister for deregulation choose to relax on the night of his Bill's publication? He spent it among friends, with the Libertarian Alliance—*[Interruption.]* I see that the Minister has other supporters in the Chamber. Among much else, the Libertarian Alliance has called for the deregulation of all drug offences; the abolition of a public police force; and privatising the currency so that every citizen will be at liberty to mint his or her own money.

Instead of telling its members, "Away with fairies," and that he had better things to do with his time, the Minister showed that he was a spirit after their own hearts. He assured them:

"Deregulation is really part of a much broader libertarian agenda which I fully share".

Economic Notes No. 54

ISSN 0267-7164 ISBN 1 85637 227 8

An occasional publication of the Libertarian Alliance,
25 Chapter Chambers, Esterbrooke Street, London SW1P 4NN
www.libertarian.co.uk email: admin@libertarian.co.uk

Roderick Moore is an information scientist. He has a BA in Geography from Newcastle University, and a postgraduate diploma in Information and Library Studies from Liverpool Polytechnic.

MONEY AND HOW TO PRIVATISE IT: AN INTRODUCTION

RODERICK MOORE

WHY MONEY SHOULD BE PRIVATISED

In recent years, Britain has seen the transfer from state ownership to private ownership of industrial enterprises as diverse as steelworks, airlines, power stations and telephone systems. Private enterprise in all these industries is now accepted as commonplace, but there is one vital commodity, used in every transaction in the market, which is still supplied by a state monopoly so ancient and all-pervasive that few people even question it: money itself. To most people today, the idea of privatising money is not just undesirable or impractical but so inconceivable that it seems completely crazy. Nevertheless, the privatisation of money is not only possible and desirable; it is the key to solving some of the worst economic problems of our time.

All modern economies, including Britain's, suffer to a greater or lesser extent from two main problems: inflation and recurring waves of unemployment. The second problem is a consequence of the first; the economic cycle of booms and recessions is caused by instability in the supply, and therefore the value, of money. Inflation, of course, is also an evil in its own right, because it makes it impossible for ordinary people to save money without having the value of their savings slowly destroyed. The trouble with inflation, however, is that although it has disastrous effects on the general public, it is also a very useful weapon for an unscrupulous government. As long as the supply of money is a state monopoly, the government can enrich itself at the people's expense by using inflation as a hidden tax which falls on anyone with savings and anyone with a fixed income which cannot easily be renegotiated. This enables the government to buy votes by taxing some people and subsidising others. It can also make itself more popular by using inflation to create an artificial boom in the economy. Privatisation would deprive the government of the power to tamper with the value of the currency for its own political purposes.

Privatisation would also help to prevent inflation for another reason. Even if the government is totally honest and does its best to maintain a stable currency, it is still faced with the problem of calculating and supplying exactly the right quantity of money required ta keep prices stable — that is, a quantity exactly in proportion to the supply of all the other goods and services that the economy is producing. Most economists now recognise that the free market is more efficient than state planning when it comes to supplying the right amount of goods and services, and — although this is not yet recognised quite so widely — money is no exception. Even with the best will in the world, the government can never obtain all the information that it needs to calculate the right amount of money for the state of the economy — and even if it could, it could not make sure that this was the quantity which was actually supplied. I will discuss this in more detail later, but at this point I will simply note that although the supply of money is a monopoly protected by the state, it is not completely under the control of the state. At present, control is divided between the state and the privately-owned banks, the policies of which the state can only influence indirectly. Privatisation would ensure that the supply of money was firmly under the control of business enterprises which could only make a profit by providing their customers with a sound and stable currency, and competition in a free market would ensure that the supply remained stable.

My arguments so far may have convinced readers that the privatisation of money would be a good idea in theory, but many of them probably still cannot see how it could be done in practice. Most people today find it hard to envisage a privately-issued currency because all the currencies in use now are issued by governments and no one has any experience of anything else. If the historical origins of our present-day currencies are fully understood, they may not seem quite such an inevitable part of modern life, so before discussing the options for privatisation I propose to give a brief account of how we got the money that we use today.

THE HISTORY OF MONEY.

1 The Evolution Of Commodity Money From Barter

Money does not just mean notes and coins issued by the Bank of England, the Royal Mint or their foreign equivalents; it means any commodity which people use as a medium of exchange - that is, they hold stocks of it because they intend to exchange it for other useful goods and services, not because they intend to use it directly. In ancient times all trade was carried on by barter, but this primitive system gave way to money because it caused the problem which economists call "the double coincidence of wants". In plain English this means that when you want something, you have to find someone who not only is offering what you want, but is willing to take what you are offering in exchange. If, for example, you are a farmer who grows wheat, and you want some fish, you have to find a fisherman who not only has fish to spare but also wants wheat. Money solves the problem because it is accepted by everyone in exchange for everything. What happened under barter was that people started to get what they wanted by indirect exchange — that is, they exchanged the goods they produced for something they thought other people would be more likely to want, and then if necessary they exchanged this in turn for something that other people would be even more likely to want, until finally they could exchange the goods that they had for the goods that they wanted. This meant that the goods which were most in demand were demanded even more, because they were wanted for exchange as well as use, until finally one commodity, or a few commodities,

were demanded far more than any others and became universally accepted as means of exchange. Incidentally, this process did not just happen in ancient times. In West Germany in the first few years after the Second World War, when the old pre-war mark had been rendered worthless by hyperinflation, tobacco and brandy came into use as money all over the country until the new Deutschemark was issued in 1948.

The currencies used by primitive societies have included everything from cattle to seashells, but in Europe and Asia by 2000 B.C. the most widely used monetary commodities were metals, and especially gold and silver. These two precious metals have certain qualities which have always led people everywhere to find them particularly convenient for monetary purposes. They are always in demand for decorative and ornamental purposes; being luxury goods, they have a high value in proportion to their weight and therefore are easily portable; they are durable and do not deteriorate with time; they can easily be made homogeneous and uniform in quality; and finally they are easily divisible into small amounts without damage. The minting of gold and silver into coins was invented as a means of certifying the weight and purity of the metal; the first coins known to history were minted in the 7th Century B.C. in the kingdom of Lydia in Asia Minor. By the time of the Roman Empire, a state monopoly in coinage was well established. The reasons for this are not completely clear, but it probably originated as a symbol of power, serving as a convenient way of carrying the image of the king or the emperor into every corner of his realm. The monopoly, however, was abused as soon as it was created, so that rulers could line their own pockets. If a king called on all his subjects to bring their coins to be melted down and reminted for some reason, or if he simply melted down the coins that he collected in taxes, he could easily mix the gold or silver with some other metal, mint more coins than he had to start with, and keep the extra ones for himself. Debasement of the coinage in this way became commonplace under the Roman Empire, and it remained a recurring problem all over Europe throughout the Middle Ages. The result, of course, was inflation. Private merchants sometimes tried to get round the problem by setting up a more trustworthy authority to mint coins — money was minted privately in Italy and the Netherlands during the Middle Ages — but in the end the state monopoly always triumphed.

2 Paper Money and Fractional-Reserve Banking

Paper money developed when people found it convenient to leave their gold and silver coins with a goldsmith or some other merchant for safekeeping and carry paper receipts issued by the merchant. Apart from safety, this had the advantage that paper receipts were easier to carry than a large weight of metal, and coins in a merchant's strongroom were not liable to lose weight through wear and tear or through having pieces of metal clipped off their edges (which was a common fraudulent practice). The receipts soon came to be accepted in place of coins as a medium of exchange, with the result that they became banknotes and the goldsmiths became bankers. This development took place in Europe in the 17th Century; the Chinese started using paper money as long ago as the Middle Ages, but later abandoned it. The first note-issuing banks in Europe were small enterprises owned by individual merchants or partnerships, but in most countries they soon faced competition from much larger banks which were specially incorporated as joint-stock companies to carry on the note-issuing business. The first bank of this kind in Europe was the Bank of Stockholm, which issued its first notes in 1661; in Britain the pioneer was the Bank of England, which was founded in 1694.

When depositors leave their money in a bank, the bank stands to gain if it lends the money again to other people. This became standard practice as soon as banks realised that only a small proportion of their depositors were likely to present their notes for redemption in coins at any given time, so that a bank only needed to keep enough gold or silver in reserve to meet a certain fraction of its liabilities to its depositors. This is the system known as fractional-reserve banking. The depositors do not lose anything from the arrangement because if a bank earns interest by lending their money, it can look after it for them free of charge, or even pay them interest on it. Fractional-reserve banking, however, does have the potential to be troublesome, because it means that the total amount of paper money issued by the banks can exceed the total value of their reserves, so that the money supply increases. This is beneficial as long as the economy creates enough new wealth to balance the new money, but if not, it leads to inflation.

3 Central Banking and Fiat Money

For reasons which I will discuss in more detail later, the experience of fractional-reserve banking led to a consensus of opinion that the system was inherently unstable if everyone who wanted to was allowed to set up a bank and issue notes. In the 19th and early 20th Centuries, one country after another limited the right of note issue to one single bank which was either owned or closely supervised by the state. In Britain the Bank of England was granted a monopoly of the note issue in the 1840s, although it was not actually nationalised until 1946.

At first these monopoly banks, known as central banks, maintained the convertibility of their notes into gold. (By the end of the 19th Century, a decline in the value of silver had led to its replacement by gold as the only monetary standard in most countries of the world. Nearly all the countries of Continental Europe adopted a gold standard in place of a silver standard in the 1870s; Britain and the U.S.A. had been on a gold standard since 1695 and 1834 respectively.) The outbreak of the First World War, however, caused a crisis. In 1914 the central banks of Britain and the other combatants suspended convertibility so that they could print money to pay for the war effort without being drained of all their gold reserves. By the end of the war the U.S.A. was the only major country still on the gold standard. The Bank of England restored convertibility in 1925, but only by the sale of 400-ounce bars worth over £1500 each, not by the issue of gold sovereigns as before. France also restored convertibility in the 1920s, but no other country did so. A few years later, the gold standard was finally destroyed by the Great Depression. In 1931 the financial weakness of the British government forced it to abandon the convertibility of the pound sterling, and by the end of the decade the gold standard was dead in America and France as well.

Since that time, all the currencies used in the world have been fiat money — that is, paper money issued by a state monopoly, not convertible into any commodity with a value in its own right, which must be used because no alternatives are legally permitted. Since governments today can create as much money as they want just by printing it, there is potentially no limit to inflation.

FRACTIONAL-RESERVE BANKING AND THE PROBLEM OF STABILITY

1. Free Banking Versus Central Banking: The Arguments

Most economics textbooks will tell you that free banking — that is, the system in which anyone can open a bank and issue as many notes as the customers are willing to take — does not work. According to the conventional wisdom which has prevailed since the 19th Century, the supply of paper money must be strictly controlled by the state through a single central bank, otherwise the banks will all issue huge amounts of notes and cause hyperinflation. When, the bubble bursts, as eventually it must, the public will all bring their notes back to the banks for redemption, but the banks will not have enough gold to redeem them, and they will default on their obligations and collapse, leaving everyone with worthless pieces of paper. Today, however, this view is being challenged by a small but increasing number of economists.

If notes are convertible into gold (or silver) on demand, then in the long run it is impossible for a bank to issue too many of them, because when the supply increases so much that they start to lose their value through inflation, the people who hold them will exercise their right to exchange them for a more valuable commodity, and they will return to the bank and be removed from circulation. However, this happens more quickly in some banking systems than in others, and in some cases it may take so long that in the end an overissue can only be corrected at the risk of causing the failure of the issuing bank. Economists are now starting to recognise that it is not central banking but free banking which is most effective in limiting the issue of notes and avoiding the risk of bank failure. This is because of the development of clearing systems. Banks stand to gain if as many people as possible use their notes (and cheques), and more people will use them if other banks accept them as deposits. This leads pairs of banks to enter into clearing arrangements, under which they accept each other's notes and settle the balance in gold. This in turn usually leads eventually to the setting up of clearing houses, which bring together all the banks in one city or one country and enable them to settle any debts which they owe each other as a result of accepting each other's notes. Clearing is carried out by transferring gold between accounts opened by all the banks at the clearing house itself or at one chosen bank. The historical evidence shows that in every country where free banking has been permitted, clearing systems have appeared. A clearing system ensures that if one bank issues too many notes, the excess amount will be returned to it for redemption very quickly, because the other banks will present it with large sums for redemption through the clearing house, having collected the money from thousands of their own depositors. Under central banking, on the other hand, an overissue of notes will be corrected much more slowly, because it can only be done through individual noteholders who present small sums for redemption at the nearest branch of the central bank, which may be some distance away.

What happens if the worst comes to the worst? In a fractional-reserve banking system, it is always possible in theory for a bank to suffer a "run" — that is, a situation in which so many of its noteholders are demanding gold at once that its reserves are inadequate to meet the demand. If the bank in question is sound and its liabilities are not greater than its assets, then it can always deal with the run by borrowing gold from other banks, or as a last resort by selling some of its assets for gold. The historical evidence suggests that when there is a run on a bank, the depositors who withdraw their money usually transfer most of it to other banks, which means that there is more gold available for the bank with the run to borrow. If, on the other hand, the bank cannot obtain enough gold because its liabilities exceed its assets — if, that is, it has become insolvent — then it is better to allow it to be put out of business by the run as soon as possible, so that the assets which it has can be shared fairly among its creditors, than to let it continue trading and lose more money. What happens if there is a run on all the banks at once? This is very unlikely and many economists now doubt that it has ever really happened. Banks can, however, protect themselves against the risk by means of option clauses. An option clause is a legally binding statement printed on each banknote which gives the bank a choice between redeeming the note on demand at its face value in gold and redeeming it after a certain number of months at its face value plus a certain rate of interest. If the bank exercises its option of delaying redemption, it gains a breathing space in which it can obtain more gold by calling in its loans. An option clause also tends to reduce the severity of a run, because it reassures noteholders that they do not need to be first in the queue to make sure that they get their gold.

Central banking was designed to solve the problems which were caused by free banking, or were believed to be caused by it, but in fact it causes much worse problems of its own. Many of these are due to the fact that under the present banking system, the supply of notes is a state monopoly, but the total supply of money is not. In the 19th Century, when central banking was first introduced, economists did not fully understand that a current account with a cheque book is just as good as money for all practical purposes. Cheques had been invented in the 17th Century, at the same time as notes, but when the ordinary commercial banks were deprived of the power to create new money by printing notes, they were permitted to continue creating it by crediting loans to their customers' current accounts. This has two important consequences.

The first consequence is the effect on individual banks. Under free banking, if a bank's customers want to withdraw cash from their accounts, the bank can print as many notes as necessary. Even if it has created new money in the form of loans credited to customers' accounts, it is still free to issue as many notes as required, so that it simply replaces one kind of newly-created money with another kind. Under central banking, however, only the central bank can print notes, and the other banks may not have enough in their reserves to meet the entire demand. This leaves them vulnerable to a new kind of run. Under free banking a bank may suffer a note run, in which its noteholders want to convert notes to gold, but under central banking it can also suffer a deposit run, when its depositors want to convert deposits to notes. To prevent deposit runs, the central bank must act as the lender of last resort — that is, it must always be ready to lend the other banks as many notes as they need to fulfil their liabilities. This is one of the central bank's most vital roles, but it is a role which is completely unnecessary under free banking. In the past there were actually some cases in which the central bank was prevented from performing this role by the regulations under which it operated. It used to be common practice for the central bank's note issue to be limited by law to prevent inflation and make a note run less

likely, but the same laws sometimes made it impossible for it to lend the commercial banks enough notes to deal with a deposit run.

The second consequence is the effect on the economy as a whole. Under the present system, the state is supposed to control the money supply to prevent inflation, but in fact it can only control the supply of notes and coins, which in Britain today makes up well under a fifth of the total. The rest of the money supply consists of deposits at the commercial banks, and the banks can expand it at will by making new credit entries in their accounts. The state can control the banks' lending to a certain extent, by controlling the interest rate at which the central bank will lend to them, and by requiring them to maintain minimum reserve ratios (that is, ratios of gold to notes, or notes to deposits), although in Britain this latter policy was abandoned in 1981. However, it can only exercise an indirect influence at best, and the result is that there is no one in complete control over the money supply. The system means that the commercial banks are tempted to behave recklessly and take unwise risks in their lending policies, because they are not responsible for their own actions; no matter what they do, they can always turn to the lender of last resort for help, instead of having to pay for the consequences of their actions out of their own resources. The state may try to control the banks more strictly through rules and regulations, but this approach tends to be ineffective because it is inflexible. The banks can usually find loopholes in the rules, and the rules may make it harder for the banks to diversify their activities and spread their risks. Under free banking, by contrast, the banks are allowed to judge their own risks, and the threat of failure gives them an incentive to judge them carefully. Under the present system the whole economy suffers as a result of the division of control over the money supply, because the supply is much more unstable. In a boom, the commercial banks inflate the currency because they have no responsibility for the new money that they create by lending, while in a slump the money supply contracts because the banks have to curtail their lending and start borrowing from the central bank.

2 The British Experience

The early history of British banking provides a particularly good illustration of the advantages of free banking in comparison with state intervention, because of the striking contrast between the English and Scottish banking systems before the mid-19th Century. In England, the Bank of England was given special privileges soon after it was founded, in return for lending money to the government. In 1697 it was granted limited liability and a monopoly of joint-stock banking within England. (At that time limited liability was a privilege which was only available by Royal Charter or private Act of Parliament. It was not until the 1850s that it became readily available to all companies by a simple process of registration.) In 1709 the Bank was given further protection against competition by a law which banned all other banks from issuing notes unless they were partnerships with no more than six members and unlimited liability. The result was that it was always vastly larger than any of its competitors and dominated the English banking industry. The six-partner banks, by contrast, were always short of capital because they depended on the personal wealth of just six people, and this kept them too small to spread their risks adequately. Whenever the economy ran into the slightest trouble, dozens of them failed, and matters were made even worse by a misconceived law passed in 1765 which banned option clauses. Later the Bank of England itself got into trouble by overissuing notes which did not return to it fast enough because of the lack of a clearing system. In 1825 and 1836 it suffered crises so severe that it was almost forced to stop paying out gold to redeem its notes, and it only avoided failure by emergency borrowing on the Paris money market. The Bank lost some of its privileges in 1826, when a new law allowed joint-stock note-issuing banks to be set up as long as they opened no branches within 65 miles of London, but it remained the dominant force in English banking.

In Scotland things were different. The Bank of Scotland was founded in 1695, a year after the Bank of England, and at first it was granted a 21-year monopoly within Scotland. This, however, was not renewed when it expired, and the Bank received no other special privileges. For another twelve years it remained the only joint-stock Bank north of the border, but in 1728 the Royal Bank of Scotland opened for business, and the two banks immediately became keen competitors. In 1730 the Bank of Scotland introduced the first option clause in Scotland, allowing it to defer redemption of its notes for six months if it paid two-and-a-half percent interest at the end of that time. Scotland's third joint-stock bank, the British Linen Company, was founded in 1746. It was originally set up to promote the linen industry by acting as a wholesaler, but it soon started running a banking service as a sideline, and it eventually abandoned its textile activities and became the British Linen Bank. After the middle of the century, new banks proliferated rapidly. Many of the banks entered into clearing agreements with each other, and in 1771 a formal clearing system was set up, with a weekly note exchange by all the banks' Edinburgh agents. By the 19th Century, some of the Scottish banks were big enough to have branches all over Scotland, but, unlike the Bank of England, no single one of them ever became big enough to dominate the entire industry, and competition remained vigorous. Throughout this time, the outstanding feature of the Scottish banking system was the stability of the note issue. Option clauses were banned in 1765, as in England, but despite this handicap, runs were almost unknown and failures were very rare. A few Scottish banks did fail, but far fewer than in England, and in almost every case the creditors were paid in full.

In the early 19th Century, a lively debate developed among politicians and economists about the future of British banking. Despite the best efforts of the admirers of the Scottish system, the debate came to be dominated by English experience and English evidence, and the consensus that emerged was that the problems of the banking industry were due to too much freedom rather than misguided meddling by the state. In 1844 the Prime Minister, Sir Robert Peel, passed the Bank Charter Act. This gave the Bank of England an effective monopoly of the note issue in England by limiting the issue of every other bank to the existing average amount. The Act also forced banks to give up the right to issue notes altogether if they merged with another bank or were taken over. A year later, Peel's administration passed a second Act which extended the Bank of England's monopoly to Scotland. This Act limited the Scottish banks' note issue to the existing average amount unless new issues were backed by a 100% reserve of gold. It was not until 1921 that the last independent English bank gave up the right of note issue, when Fox Fowler was taken over by Lloyds, but since Peel's Acts the Bank of England has served as the central

bank for Britain. The three remaining Scottish-based clearing banks still print their own notes to this day, unlike their English counterparts, but today their notes must be backed by a 100% reserve of Bank of England notes. The 1844 Act also limited the Bank of England's note issue to reduce the risk of a note run, but it did nothing, to stop the expansion of the other banks' deposits through credit creation, and it was after the Act was passed that cheques became widely used for the first time. The new system led to crises in 1847, 1857 and 1866 when deposit runs started, and the government was forced to suspend the Act and allow the Bank of England to issue extra notes.

3 The American Experience

The history of American banking includes some very successful examples of free banking systems, but also some of the experiences which did most to give free banking a bad name. In the first sixty years after independence, the U.S.A. made two attempts to set up a national bank with special privileges. The First Bank of the United States was founded in 1791 under a 20-year charter; the federal government owned a large share in it and granted it the right to open branches in any state and a monopoly of federal deposits. Its privileges aroused political opposition, however, and when its charter expired it was closed down. Five years later the Second Bank of the United States was founded, also under a 20-year charter; it was very similar to its predecessor, with the same privileges, but it encountered the same opposition and in 1836 it met the same fate. For the next twenty-seven years, the federal government made no attempt to intervene in the banking industry, but left policy entirely up to the discretion of the individual states. It was during this time that some of the best and worst examples of free banking occurred.

By 1836, many banks had been founded under charters granted by state governments, and in some states charters were so easily obtainable that banking was free in everything but name. (Unlike the Banks of the United States, these banks were only allowed to open branches in their home state.) In the New England states, which were one of the most economically advanced regions of the country, enough charters had been granted by the 1820s to create a vigorously competitive market in banking, despite the privileges of the Second Bank of the United States. It was here that one of free banking's greatest successes had its origins. The banks in the city of Boston decided that the banks based in the smaller towns in New England had too large a share of the note circulation in the city, because transport problems made it harder to present country banks' notes for redemption, so that any Bostonians who wanted gold always got it by cashing in the notes issued by the city banks. In 1825 the Suffolk Bank, one of the leading banks in Boston, set out to rectify the situation. It started running a clearing service for the other Boston banks, and at the same time collected any country notes which they had received from their depositors and sent them back to the country towns for redemption. The country banks were faced with a choice between being suddenly presented with large sums of notes, which they might find hard to redeem all at once, or joining the Suffolk clearing system themselves, which would have the effect of limiting their note issue, and they invariably chose the latter. The result was that the Suffolk system very soon spread throughout New England, and for more than thirty years it ensured that the region had a stable note issue and very few bank failures. The success of the system led to it being copied in the other main commercial centres on the East Coast; in New York the Metropolitan Bank was founded in 1851 as a direct imitation of the Suffolk Bank, and in Philadelphia the Farmers' and Mechanics' Bank started running a similar service in 1858. In Boston the original clearing system eventually came to an end because of dissatisfaction among the country banks, who believed that the Suffolk Bank was overcharging them. They joined forces with another Boston bank, the Exchange Bank, to found a rival clearing house called the Bank of Mutual Redemption; it started trading in 1858, and the Suffolk Bank abandoned its clearing service in the same year.

After the Second Bank of the United States was closed down, several states passed free banking laws which allowed anyone to open a bank without even the formality of being granted a charter. It was in some of these states that the reputation of free banking was tarnished by the phenomenon known as "wildcat banking", in which fraudsters set up dozens of unsound banks which very soon collapsed, leaving thousands of their depositors financially ruined. The evidence suggests, however, that in these cases it was not the free market that caused all the trouble but the policies of state governments.

The worst case of wildcat banking occurred in Michigan, where a free banking law was passed in 1837 but had to be suspended only a year later. The trouble first started because of low standards of law enforcement. Michigan was still part of the wild frontier in the 1830s, and fraudsters found it easy to move gold from bank to bank one jump ahead of the state auditors, or to disguise barrels of nails as barrels of gold by putting a thin layer of gold coins on top of the nails — tactics which would never have worked in the more advanced Eastern states. This, however, was not the principal cause of the problem; it was made very much worse when the state government intervened at a crucial moment by allowing banks to suspend the convertibility of their notes into gold, so that there was no limit to the amount of worthless notes they could issue.

In every other outbreak of wildcat banking, the trouble was caused by state bonds. Free banking laws usually required banks to put a certain proportion of their funds into assets chosen from a special list, on which the main items were state and federal bonds. The purpose of this measure was to protect the banks against insolvency, but in practice the financial weakness of some state governments often meant that it had exactly the opposite effect. In 1841 and 1842 nine states defaulted on their debts, mainly in the South and the Mid-West, and for years afterwards there were recurring fears that the same thing might happen again. One of the states which defaulted in 1841 was Indiana. In 1852 it passed a free banking law, and two years later it suffered an outbreak of wildcatting when the price of its bonds fell suddenly. In 1855 the law was changed to remove Indiana bonds from the list of eligible assets, and the problem was solved. The next major outbreak occurred in 1859 in Minnesota, which had passed a free banking law a year earlier. In this case the trouble arose because the state government had embarked on a policy of subsidising railway construction by making cheap loans to railway companies and selling bonds to raise the money. Many of the new railways proved to be highly speculative ventures and soon went bankrupt, which of course had repercussions on the price of the bonds and the soundness of the banks that held them. The other two main cases both occurred during the

crisis which led to the Civil War. The states of Illinois and Wisconsin had passed free banking laws in 1851 and 1852 respectively, and for several years the laws had worked well. Both states, however, had listed bonds issued by slave states as eligible assets, and the price of those bonds collapsed when it was feared that the state governments might fail to honour their debts to Northern creditors. This led to wildcat banking in Wisconsin in 1860 and in Illinois in 1861. Incidentally, a list of eligible assets was also partly responsible for the crisis in Michigan in 1837; under the Michigan law, mortgages on land were eligible, and fraudsters had worthless land falsely certified as valuable.

Some of the states with free banking laws had banking systems which were among the most successful in the country. The outstanding example was New York, where the free banking law was passed in 1838. In the first few years the system suffered from teething troubles, mainly due to the list of eligible assets, which until 1840 included other states' bonds. In that year, however, the law was amended so that the only eligible bonds were those issued by the New York state government or the federal government, both of which were financially sound. During the state debt crisis of 1841 and 1842, some New York banks failed and their depositors lost money, but after 1843 the losses stopped and the banks in New York soon became some of the soundest in America. Other states later passed free banking laws which were equally successful, including Ohio in 1851, Louisiana (the location of the major commercial centre of New Orleans) in 1853, and Tennessee also in 1853. In all the states with free banking, option clauses were prohibited, but this did very little to impede the success of the best banking systems. (Option clauses were permitted in some of the states where banks had to be chartered. In Massachusetts, the home of the Suffolk system, they were allowed under a law passed in 1809, but a minimum interest rate of 2% per month was stipulated.)

The outbreak of the Civil War in 1861 caused a crisis in the American banking industry, because the banks in the rebel states repudiated their debts to Northern banks and the federal government started demanding compulsory loans to pay for the war effort. The result was the setting up of the National Banking System in 1863. This was a cartel in which an exclusive right to issue notes was granted to a limited number of privately-owned banks which were allowed to call themselves National Banks. The U.S. Treasury undertook to redeem all the notes of any National Bank which failed, but the banks' note issue was restricted by the high reserve ratio which they were required to maintain, and by an additional requirement to hold U.S. bonds as security. Like British banking after Peel's Bank Charter Act, the National Banking System proved to be very vulnerable to deposit runs, especially since U.S. bonds were often in short supply in the late 19th Century because of surpluses in the federal budget. The system suffered crises in 1873, 1884, 1890, 1893 and 1907 because the National Banks were not allowed to issue enough notes to cope with sudden increases in public demand, and the banks had to resort to the use of clearing house loan certificates instead. These were certificates issued by a clearing house to a bank in return for assets such as bonds, bills of exchange or other evidence of the bank's loans to its customers, which the bank deposited at the clearing house. The banks used the certificates to settle debts to each other through the clearing system so that they could conserve their stocks of notes and use them to make payments directly to the public. In some cases, as a last resort, the banks even issued the certificates to the public in place of notes; strictly speaking this was illegal, but the government chose not to enforce the law. The recurring crises eventually led to a consensus that the system's faults were due to too much freedom rather than too little, and in 1914 it was replaced by the Federal Reserve System, a full-scale central bank owned by the federal government.

4 Experience Elsewhere

As well as Britain and the U.S.A., there were several other countries where free banking systems operated very successfully for many years. The last major country in the world to abandon free banking in favour of central banking was Canada. The first note-issuing bank in the British colonies which later became the Dominion of Canada was the Bank of Montreal, which was founded in 1817. Two more banks were founded the following year, and after that the numbers grew steadily. Not all the notes which circulated in Canada were issued by banks; in 1866 the government of the Province of Canada (comprising the present-day Ontario and Quebec) started printing its own notes to pay its bills. These were issued directly by the government, without a central bank as an intermediary, but they were convertible into gold on demand just like banknotes. The practice was continued by the Dominion of Canada, which was founded in 1867 when the Province of Canada was united with the colonies of Nova Scotia and New Brunswick. In 1868 the Dominion Notes Act authorised the Ministry of Finance of the new Dominion to print its own paper money, and "Dominion notes" circulated alongside private banknotes until central banking was introduced. Despite this element of state involvement, the free banking system was very successful in supplying a stable currency, and it aroused considerable admiration in the United States when the National Banking System was suffering its frequent crises. Clearing was carried out by bilateral agreements between banks in the early years of the system, but the growth in Canada's population and the expansion of its economy led to the setting up of the first clearing houses in 1887. It was not until the outbreak of the First World War that the system was dealt a fatal blow. In 1914 the government suspended the convertibility of Dominion notes and allowed the private banks to do the same thing with their own notes. Convertibility was restored for just three years in the 1920s, but then it was suspended again, and the gold standard was officially abandoned in 1931, at the same time as in Britain. Free banking finally came to an end in 1935 when the government set up the Bank of Canada and made the note issue a state monopoly.

Sweden was the home of the first joint-stock note-issuing bank in Europe, but its experience of free banking did not come until much later. The Bank of Stockholm got into difficulties soon after it was founded, and in 1668 it was nationalised and renamed the Sveriges Riksbank (Swedish National Bank). For more than a century and a half afterwards it held a monopoly of the Swedish note issue. This, however, was brought to an end in 1824 when the government, inspired by the success of free banking in Scotland, passed a law which allowed the chartering of private note-issuing banks. At first, Swedish entrepreneurs were slow to take advantage of the new law, because of uncertainties about its interpretation, but in 1831 the first private bank started trading, in the town of Ystad on the south coast, and others soon followed. Banking was not completely free, because of the requirement to obtain a charter from the government, but in practice charters were readily available and

the industry soon became keenly competitive. By the end of the 1850s twelve private banks had been founded, and their combined share of the note circulation had reached 43%, while the Riksbank had the other 57%. A decade later the number of private banks had more than doubled, and their share of the note issue had overtaken that of their state-owned rival. In 1864 a law was passed which allowed option clauses but imposed a minimum interest rate of 5% per year; redemption could be either in silver or in Riksbank notes which were themselves redeemable in silver. In 1873 Sweden adopted a gold standard in place of silver, and the following year a new law required the private banks to redeem their notes in gold alone. Throughout this time the free banking system was so successful that no chartered bank ever failed completely. Two banks were put out of blusiness by fraud; one closed down and the other was taken over by a rival, but in both cases the creditors were all paid in full. In the end, however, the system proved to be too successful for its own good. Towards the end of the 19th Century it came under attack from the political supporters of the Riksbank, who were worried that the state bank was losing too much business to its private competitors. In 1897 the government passed a law requiring all the private banks to give up the right of note issue by the end of 1903, and in the latter year the Riksbank once again became the sole note-issuer.

Swiss banks are famous for their soundness as well as their secrecy, and it is significant that Switzerland had a successful free banking system for over three-quarters of a century. The first note-issuing bank to be incorporated in Switzerland was the municipally-owned Depositokasse der Stadt Bern (Berne City Deposit Bank), which opened in 1826. The Berne Cantonal Bank followed in 1834, and the first joint-stock private bank, the Bank of Zurich, started trading in 1837. An unusual feature of the early years of Swiss banking was that different banks issued notes in different denominations. Amazing as it may seem today, Switzerland actually had no national currency until 1850, when a new silver franc was first minted. Until then, the coinage was the responsibility of the individual cantons, but by the 19th Century the cantonal currencies had been debased so often that they were very little used except for paying taxes. The most widely used coins in Switzerland at that time were the thaler and gulden, which were minted by several of the independent states of southern Germany, with their weight and purity standardised by treaty, and the French franc. By 1850 Switzerland had eight note-issuing banks, and in response to public demand seven of them had chosen to denominate their notes in French francs, thalers or guldens and redeem them in French or German coins, even though strictly speaking those coins were not legal tender. Of the eight banks, four were owned by cantonal or municipal governments, but it was the four private ones which were the most successful, with 87% of the note circulation in 1850. After the currency reform the banks all changed over to the new Swiss franc, and an increasing number of new banks were founded, some of them private, others owned by local governments. The banks gradually entered into bilateral clearing agreements with each other, and the system worked very well. Only one Swiss bank ever failed under free banking; the Valais Cantonal Bank collapsed in 1870 because of deficits in the cantonal budget, but the government of the canton redeemed all the notes in full. In 1874 Switzerland abandoned the silver standard in favour of gold, but this had little effect on the banking system. A more significant change came in 1881, when a new law curtailed the banks' freedom by requiring them to maintain a very high reserve ratio. Free banking was finally abolished, not because it had failed in practice, but because a central bank was believed to be necessary on theoretical grounds. This came about in 1907 when the Swiss National Bank was founded and given a monopoly of the note issue.

PRIVATISATION: THE OPTIONS

1 A Return to the Gold Standard

One obvious way of privatising money would be to reintroduce the gold standard, with free banking and a free market in the minting of gold coins instead of the state coinage monopoly. The gold standard has much to commend it; it was responsible for all the periods of stable prices that Western civilisation has ever known, and it kept prices roughly stable for two hundred years in the 18th and 19th Centuries, first in Britain and then in the whole world. Nevertheless, it is far from perfect. The late Friedrich Hayek called it a "wobbly anchor", which sums it up very well. If the supply of money is linked to the supply of a commodity which is physically limited in quantity, then it also will have a certain limit set on it, and inflation will be kept in check to a certain extent. However, it is impossible to guarantee that the supply of any one single commodity will always be exactly in proportion to the total supply of all the goods and services produced by the economy. Under the gold standard, both inflation and deflation are still possible; inflation, for example, can be caused by chance events such as the discovery of new goldfields or the invention of new methods of mining the metal or refining it from the ore. This happened in the 16th Century when the Spaniards conquered Mexico and Peru; they discovered major new sources of gold in their Latin American colonies, and the result was many years of high inflation in Europe.

At this point it is worth dealing with the arguments of the American economist Murray Rothbard, who for many years has advocated a gold standard with a 100% reserve. Rothbard considers that fractional-reserve banking should be banned by law because it is equivalent to fraud. This view is misconceived; although it is illegal not to pay your debts, it is not illegal to be in a position where you could not pay your debts if you were asked, but no one is asking you, and it is this latter position which is the equivalent of fractional-reserve banking. There is nothing fraudulent about a fractional-reserve policy as long as the bank announces it openly and makes it clear to all its customers. A 100% reserve policy would in fact be less popular with most customers because it would mean that banks could not pay them interest on their deposits, but would have to charge them for looking after their money instead, since the money would not be earning revenue for the banks.

2 Competition Between Irredeemable Paper Currencies

In 1976 Friedrich Hayek wrote a blook entitled *Denationalisation of Money* in which he proposed a private monetary system totally different from the gold standard or anything else that had ever existed before. Under Hayek's scheme, every bank would be allowed to issue its own paper currency in its own denomination, using a name of its own choice for the monetary unit, such as the "ducat" or the "talent", which would be protected against forgery by the law of copyright. Like our present state currency, these private

currencies would not be redeemable in gold or any other physical commodity, but if any currency started to suffer from inflation, the public would immediately start using other currencies instead, so the issuing bank would be forced to curb the supply or risk losing its trade. Each bank would control the supply of its currency by expanding or contracting its lending, and would monitor the value of the currency by observing the prices of a number of widely-traded commodities, adjusting the supply to ensure that those prices remained as nearly as possible constant. Since each bank would be the sole issuer of its own currency, instead of having to act as the lender of last resort to other banks with independent lending policies, it would have full control over the quantity of money in circulation, so it could make sure that there was no inflation or deflation.

Hayek himself conceded that one problem with this scheme would be that it would reduce competition in banking to a certain extent, because only a few of the biggest banks would find it economic to issue their own currencies. The majority of banks would have to take deposits and grant loans in another bank's currency, and since they could not print their own notes in that currency, and the issuing bank would be under no obligation to act as a lender of last resort, they would have to adopt a 100% reserve policy. (They could issue "satellite notes" redeemable in a bigger bank's notes, but they would still have to maintain a reserve ratio of very nearly 100%.) The result would be that cheque accounts would only be available from currency-issuing banks; the other banks would be unable to compete in this sector of the market, because they would have to charge for the service, while the currency-issuing banks could provide it free of charge or pay interest on accounts. Non-currency-issuing banks would be confined to running deposit accounts from which customers could not withdraw money without giving advance notice.

A more serious defect in Hayek's proposed system involves the question of standardisation. As any A-Level economics textbook will tell you, money performs four functions: it acts as a medium of exchange (money paid for goods and services); a store of value (money kept in reserve for future payments); a unit of account (prices quoted for goods and services offered for sale, and records of money received and spent); and a standard of deferred payments (records of money lent or borrowed and due to be repaid in the future). These can be divided into exchange functions (the first two) and measurement functions (the second two). For exchange purposes, the most important quality of a currency is stability of value, and under Hayek's system this would be guaranteed by competition. For measurement purposes, however, standardisation is an equally important quality. When anything is being measured, whether it is length, weight, temperature or the relative value of goods and services, it is a great advantage if everyone uses the same unit of measurement. It is easy to imagine how much more complicated life would be if all the goods in every shop were priced in Barclays ducats, Lloyds talents, Nat West florins and Midland crowns instead of just pounds sterling. A business could always choose to accept payments in just one currency, but customers would then have to exchange their holdings of other currercies for that currency before making purchases, and the banks would make a fortune out of charging commission. Even today, as more and more people travel overseas for business or pleasure, it is becoming increasingly common to hear complaints about the cost and inconvenience of exchanging one currency for another at international borders, and few people would relish the prospect of having to do the same thing in their own country every day of their lives. Hayek suggested that a degree of standardisation could be achieved if groups of banks agreed to monitor the value of their currencies against the same commodities, but even so, complete standardisation would still be impossible. The ultimate guarantee of the value of any paper currency is the right of the public to convert it into something else, and under Hayek's system that other thing could only be another paper currency, so the system could only work if there were at least two currencies which could vary in value in relation to each other. If all the banks agreed to maintain their currencies at the same value, they could all inflate them at the same time. Our present system of fiat money is a system of standardisation without competition, but Hayek's system would mean competition without standardisation. The ideal monetary system would be one which combined standardisation and competition.

3 A Composite-Commodity Standard With Indirect Redeemability

It was noted as long ago as the 18th Century that a certain amount of instability in prices was inevitable when a single commodity such as gold or silver was used as the monetary standard. It was the Scottish economist Sir James Steuart, writing in 1767, who first suggested that it would be better if some way could be found of linking the value of money to the values of all the commodities in the market, or at least as many of them as practically possible. During the 19th Century a number of other economists took the same view, including such leading figures as W. S. Jevons and Alfred Marshall, but it was not until 1911 that the first really feasible scheme was put forward. In that year the American economist Irving Fisher wrote a book called *The Purchasing Power of Money*, in which he proposed what he called the "compensated dollar".

In the days of the gold standard, the value of each monetary unit was equal by definition to the value of a certain weight of gold. In Britain, for example, the pound sterling was equal to 113 troy grains of pure gold, which was the weight of metal in the gold sovereign for which a pound note could be exchanged at the Bank of England. Under Fisher's scheme, by contrast, the value of the dollar (or the pound, or whatever) would have been defined as equal to the value of a basket of commodities which included all the main raw materials and basic foodstuffs consumed by the economy — a certain weight of wheat, plus a certain weight of cotton, plus a certain weight of rubber, plus a certain weight of copper, and so on. Each banknote would have been redeemable, not in a fixed weight of gold, but in a weight of gold equal in value to the basket of commodities which served as the monetary standard. Fisher himself was a supporter of central banking and envisaged that government statistical office would be responsible for gathering data on prices and calculating the value of the standard in relation to gold, but the idea of a composite-commodity standard has recently been revived by Dr. Kevin Dowd of Nottingham University, who is an advocate of free banking.

If a composite-commodity standard was introduced, the commodities making up the standard would have to be raw materials and basic foodstuffs so that their exact grade and quality could be clearly specified and their uniformity guaranteed; manufactured goods would not be suitable because they vary so much. The number of commodities to be in-

cluded would be a matter for debate; Fisher himself noted that the wholesale prices of 257 commodities were published by the U.S. Bureau of Labour, but a smaller number, such as a few dozen, might well be adequate. The commodity used by banks for redemption would not necessarily have to be gold; in principle it could be anything, but in practice a precious metal would be most convenient, for the same reasons that led to precious metals being used as money in the first place. The system of indirect redeemability would mean that gold, silver or platinum would have to be minted into coins or small ingots denominated purely by weight, rather than in a currency unit like the pound or the dollar. (Direct redeemability would be possible in theory, and has in fact been seriously proposed by one or two economists since Fisher, but since it would mean storing dozens of commodities in warehouses and issuing warehouse warrants instead of gold to redeem banknotes, it would be prohibitively expensive and inconvenient in practice.)

A composite-commodity standard would combine monetary standardisation with monetary competition because every bank could adopt the same basket of commodities as its standard, while the freedom to issue notes would force banks to compete with each other for custom. A clearing system would prevent overissue, as in free banking systems which used silver or gold as the standard. Inflation and deflation would not be completely impossible under a composite-commodity standard, but they would be very unlikely. The gold standard was able to keep prices stable for two hundred years in its heyday, even though it depended on a single wobbly anchor, but a composite-commodity standard would mean that the value of money was stabilised by several dozen anchors. In the event of a note run, the system would have another advantage over the old gold standard, because the increased demand for gold would raise its price in relation to other commodities, and so the banks would have to pay out less gold to redeem each unit of currency, which would reduce the pressure on their reserves.

HOW TO GET THERE FROM HERE

From my comments above, readers will have guessed that in my judgement a composite-commodity standard, combined with free banking, would be the best bet for a private monetary system. There remains the question of how to introduce such a system in place of our present state monopoly. There are two possible paths to this goal: creating a new private monetary unit to replace the pound sterling, or redefining the pound in terms of a basket of commodities and handing over the note issue to the private banks instead of the Bank of England. It is likely that the second option would present fewer problems, because it would involve keeping the same unit of account. The historical evidence shows that traders and businessmen are always very reluctant to change their unit of account, even when a state currency is suffering from hyperinflation, because it is so time-consuming and expensive for them to recalculate all their old accounting records. Another reason for their reluctance is that it is not profitable for one trader to change his unit of account unless every other trader does so at the same time, because when two trading partners are using different units, one of them is lumbered with the expense of converting all prices into his own unit before he can record the sums of money that he pays or receives.

At this point it is worth commenting on a scheme proposed by Friedrich Hayek in 1986 in an article entitled "Market Standards for Money". Hayek suggested that a version of the composite-commodity standard could serve as a kind of halfway house between the present monetary system and full privatisation. Under this scheme, the existing state currency would continue to circulate as a medium of exchange, and banks would accept deposits in it, but bank accounts would be denominated in a new monetary unit based on a basket of thirty or forty commodities. When a customer made a deposit in state currency, his account would be credited with an equivalent sum in composite-commodity units, and when he withdrew money, he would be entitled to whatever sum in state currency was required to redeem his account at the current rate of exchange, even if the state currency had declined in value through inflation. The banks could afford to operate this system if they denominated their own loans in composite-commodity units. Although this is an attractive scheme in many respects, its one great drawback is that it would involve changing to a new unit of account.

One of the most important questions to be resolved would be the future of the Bank of England after privatisation. Under free banking, a lender of last resort would no longer be necessary, but it would probably be better if the Bank of England did not give up this role until some time after the commercial banks had been given the freedom to issue their own notes, so that bankers would have time to get used to their new rights and responsibilities. A clearing house, however, would be necessary under free banking, and the Bank of England is well placed to adopt this role. Under the present cheque-clearing system, the administration is all handled by the Bankers' Clearing House, but the actual debts owed by one bank to another are settled by transferring money between their accounts at the Bank of England. Free banking would mean that notes would have to be cleared as well as cheques, which would increase the volume of business very considerably, and the Bank of England could become a modern equivalent of the Suffolk Bank and the Metropolitan Bank in 19th Century America. Today the Bank performs certain other functions as well as banking, such as compiling economic statistics and managing the national debt on behalf of the government; these jobs could be handed over to private subcontractors. (The Bank could, of course, bid for the contracts if it so desired.) Once the Bank had been transformed into a clearing house for the private monetary system, it could itself be privatised.

Kevin Dowd has suggested that the state could still play a limited role in the monetary system after privatisation, by adjusting the composition of the commodity standard from time to time. He argues that this would be necessary if some commodities ceased to exist, and it would also make it possible to allow for changes in the relative value of commodities as supply and demand changed. It is true that this could make the value of the standard slightly more stable in theory, but in practice it would also entail the risk of politically-motivated abuse, and since the standard would already be many times more stable than the gold standard, it would probably be better on balance to exclude the state completely from any role in the supply of money. As for the risk that some commodities might disappear from the market, this has not happened to any raw material since flint gave way to bronze at the end of the Stone Age, so it is not likely to be a common problem.

MONEY IN EUROPE

At present the political debate in Britain about monetary reform is not centred on privatisation but on whether to hand over the state monopoly to a European superstate. The advantages of a single currency for the single European market are quite real, which is why so many leading businessmen are strongly in favour of a European monetary union. With a single currency there would be no need to pay commission when exchanging one currency for another, or to hedge against changes in the exchange rates. However, these advantages are far outweighed by the political dangers inherent in concentrating so much power in the hands of a federal superstate. The kind of monetary union that is now being envisaged would reproduce all the faults of our present system on a vastly larger scale. If Jacques Delors' famous EMU is ever hatched, it will not be long before it is laying rotten eggs all over the place.

Margaret Thatcher is absolutely right when she says that Britain would be giving up its sovereignty and independence if it was forced to use a state monopoly currency issued by a foreign power, but she is wrong to assume that the only alternative is a currency issued by a British state monopoly. Since London is the largest financial centre in Europe and one of the top three in the world, Britain is in a better position than any other European country to lead the way in introducing a privately-issued composite-commodity currency. If such a currency spread throughout Europe by being freely and voluntarily accepted, it would achieve all the advantages of the federalist scheme for monetary union without any of the disadvantages. A country with a permanently inflation-proof currency and free banking would attract banking business from all over the world, so whichever country is the first to introduce a composite-commodity standard will immediately put itself one jump ahead of all the rest. It seems that the federalists in the Continental countries are still determined to go ahead with their plans for monetary union, despite the collapse of the Exchange Rate Mechanism in August 1993, so while they are preoccupied with a wild goose chase (or wild EMU chase), Britain has a perfect opportunity to seize the initiative.

Or at least we could do so, if we still had a Prime Minister with courage and vision.

BIBLIOGRAPHY

This pamphlet is designed for readers who have not studied economics at university level. The works listed below are suitable for those readers who are interested in a more advanced treatment of the subject.

RECOMMENDED READING

Kevin Dowd, *Private Money*, Institute of Economic Affairs, London, 1988.

Kevin Dowd, *The State and the Monetary System*, Philip Allan, Hemel Hempstead, 1989.

Kevin Dowd (ed.), *The Experience of Free Banking*, Routledge, London, 1992. Includes chapters on Scotland, the U.S.A., Canada and Switzerland.

Friedrich A. Hayek, *Denationalisation of Money* (1976), 3rd ed., Institute of Economic Affairs, London, 1990.

Lawrence H. White, *Free Banking in Britain*, Cambridge University Press, 1984.

OTHER USEFUL WORKS

Irving Fisher, *The Purchasing Power of Money* (1911), Augustus M. Kelley, New York, 1985.

A. W. Flux, *The Swedish Banking System*, Government Printing Office, Washington DC, 1910.

Friedrich A. Hayek, "Market Standards for Money", in *Economic Affairs* 6(4), April/May 1986, pp. 8-10.

Hugh Rockoff, "The Free Banking Era: A Re-examination", in the *Journal of Money, Credit and Banking* 6(2), May 1974, pp. 141-167. Deals with the U.S.A.

Arthur J. Rolnick and Warren E. Weber, "The Causes of Free Bank Failures: A Detailed Examination", in the *Journal of Monetary Economics*, 14, 1984, pp. 267-291. Deals with the U.S.A.

Lars G. Sandberg, "Banking and Economic Growth in Sweden Before World War I", in the *Journal of Economic History*, 38(3), September 1978, pp. 650-680.

George S. Tavlas, "Commodity Standard or Monetary Rule?", in *Economic Affairs*, 7(6), August/September, 1987, pp. 6-12. Deals with the history of proposals for a composite-commodity standard.

George Trivoli, *The Suffolk Bank*, Adam Smith Institute, London, 1979.

Ernst Juerg Weber, "Currency Competition in Switzerland, 1826-1850", in *Kyklos*, 41(3), 1988, pp. 459-478.

The words quoted on the cover of this publication are those of Mr. Robin Cook, the Labour Party Spokesman for Trade and Industry, speaking in the House of Commons, London, on February 8th, 1994, as reported by *Hansard*, the official Parliamentary journal of record.