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Plain Money

A Proposal for Supplying the Nations with
the necessary Means in a modern Monetary System

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The following text consists of brief introductory lectures prepared for seminars, hence its at times colloquial character. The content concerns a proposal for modifying the monetary system; a modification being a modernisation of money in line with the ongoing evolution of the monetary system which would be easy to make from a technical point of view and with considerable advantages for both private and public budgets.

To begin with, a description of the proposal, called plain money, will be given. To do that, it is necessary to look into a number of issues relating to monetary and financial theory, concerning the understanding of money, the creation and circulation of money, and the role of the banks and the central bank in the two-tier banking system. In discussing these and related issues the monetary questions which the proposal can give an answer to will be explained. In the later sections the focus will be more on explaining why the proposal is useful in practice and which economic and political problems the proposal can provide a solution to.

The plain money proposal

The plain money proposal says: Give the central bank unimpaired full control of the total money supply on the legal basis of a general prerogative of money creation. In other words, have the entire money base - cash as well as non-cash money - exclusively issued by the central bank. This implies the abolition of the banking sector's capability to create non-cash money in the form of sight deposits. Today, there is a mixed money base made up of one kind of money created by the central bank and another kind of money (sight deposits) created by the banks. Plain money still implies a two-tier banking system, but it does not mean having a mixed money base any longer, instead, just one kind of money from a single source, easy to understand, to handle and to keep control of.

Plain money does not necessitate particular changes of institutional and market structures. Simply, banks would be credit brokers and no longer be credit creators. They would lose today's seigniorage, the extra profit from the creation of non-cash money. Apart from that, the normal profitability of the banking business will remain untouched. Banks would be able without any restrictions to continue to carry out every kind of business they do now, e.g. managing deposits and transfers of their clients, granting loans to whomever they consider creditworthy, investing in finance market papers such as bonds or equity shares for their clients and for themselves, offering any variety of financial products, etc. The central banks would finally become public authorities which fulfill their task of determining and regulating the money base from a position of power-separated independence.

There are three main advantages from plain money: constitutional order, broad-based economic viability and, to a certain extent, financial stability. We face a strategic choice today between either public money and public control of the money base or private money beyond public control. This is a question of constitutional importance, particularly in view of the role of money – separate from and

complementary to the law – as the most important instrument of economic and societal control.

Furthermore, the result of taking the step to plain money can be more sound and safe money, greater financial stability and, following from this, greater stability of the business cycle and price levels, including interest rates and currency exchange values. Even more important today, plain money would improve economic viability on a broad base because it *can* be issued free of interest and redemption. Debt-free plain money definitely renders possible both a lowered tax burden and a lowered interest burden on the economy resulting in higher levels of net income and an extended capital base for both firms and private households, making them less dependent on subsidies and allowances as well as external capital, facilitating investment and employment, and leaving firms and people better enabled to make their own choices in struggling through life.

Money, deposits, accounts, and the money supply

Some people may be wondering about the proposal because they think money comes from the central bank anyway. When the banks need fresh money they can be refinanced at the central bank by borrowing, i.e. the central bank issues money to the banks by granting them loans against bills of exchange and other types of debt securities. This is true but is just a small part of the picture. Central banks actually do not have a prerogative on the creation of money. The money in circulation stems from different actors and sources.

There are several groups of financial actors in the arena: (1) the central bank, (2) the banks with a licence to refinance at the central bank, and (3) the public. The public is basically made up of (3a) private persons or private households, (3b) businesses and corporations, large and small, in any sector, including brokerage, institutional investment, private insurance, and (3c) the public budgets of the state, the municipalities, public insurance of unemployment, health and retirement, public media, and similar bodies under public law levying tax-like fees.

These actors deal with three types of means of payment serving as currency: (1) coins, (2) banknotes and (3) sight deposits. A sight deposit is also referred to as cash deposit, money deposit, checking deposit, demand deposit, and overnight deposit. Speaking of cash deposit was certainly correct decades and centuries ago, but today, for the most part, the word is no longer appropriate, since depositing cash has become a rather unusual way of building up sight deposits. The alternative term money deposit could be suitable, but it is not yet, because the monetary status of sight deposits is still ambivalent, i.e. sight deposits are already being used as if they were money, but in reality they are not until they become plain money. The expression checking deposit relates to the procedure of making out a cheque as a claim of the bearer to be paid from the checking account. Writing out cheques, however, seems to have been a rather transitional payment practice which is now rapidly being replaced by less cumbersome ways of payment. The expression nev-

ertheless reveals that the deposits in question serve as money, as a means of payment, in contrast to other types of deposits which do not.

The remaining expressions, demand deposit and overnight deposit, are also basically appropriate, because sight deposits are payable any time on demand of the customers, and banks have to be prepared for such payments on a day-to-day basis. The real level of preparedness though is very limited, because customers usually prefer to dispose of their money in a cashless way, and cashless payments are done by clearance rather than actual payment. So the terms demand deposit and overnight deposit are rather theoretical despite being of tremendous practical importance, as will be seen later. In the following, the more neutral word sight deposit will be used. Sight deposits are handled and cleared on the current accounts (called checking accounts in America) which are maintained by the public and the banks themselves at a bank. Coins and banknotes are cash; sight deposits are non-cash money.

The cash and the sight deposits together make up to the money supply called M1 (or M-1B in America). There are special questions, e.g. should the cash held by the banks as a reserve for cash transactions be included or excluded from M1. Besides such special questions, the sum of cash and sight deposits basically add up to M1, and M1 is the amount of money in circulation. Other types of deposits, particularly savings deposits and fixed-term deposits, or items on other accounts such as debt securities, bonds and equity shares, represent *capital, not money*, because you do not regularly pay with them. Employees may be remunerated by receiving equity shares in addition to wages, or when times are bad people may get food and fuel as a recompense. These and similar types of transfers, however, are not payment in money but payment in capital and kind, i.e. transfers of valuables other than money. The only type of deposit you are able to make regularly cashless money payments with are sight deposits on current accounts. So only sight deposits on *current accounts are transaction deposits*, whereas all other types of deposits are *investment deposits on capital accounts*.

That is why the so-called money supply M2, which includes savings deposits in addition to M1, and M3, which includes fixed-term deposits in addition to M2, are *not* measures of the money supply, but at best aggregate indicators mixing the amount of money M1 with different stocks of interest-bearing capital – which is misleading from the outset. Furthermore, the savings deposits in M2 can in most countries be withdrawn to a certain extent any time on demand. NOW-accounts¹ offered by U.S. savings banks can completely be withdrawn any time. In the same way, ever more banks offer special arrangements for fixed-term interest-bearing deposits, being formally deposits redeemable at notice, but actually redeemable on demand. So not insignificant parts of M2 and M3 are registered falsely in the statistics. In reality, M1 and the annual growth of M1 must be bigger, and that of M2 and M3 less, than statistics reveal.

¹ NOW = Negotiable Order of Withdrawal

The creators of the money base. The abdication of gold which left non-cash money as the basic type of money, and revealed the informational nature of money

Which are the institutions that create the money in M1? Today, the national central banks – in the European Union since 1 Jan 1999 the European Central Bank – hold the monopoly on the creation of *banknotes*. In Europe, with its feudal history, the monopoly on *coins* usually remains with the governments' treasuries (finance ministries), as a remnant of the times when the coins were made of pure gold, silver or copper, and came out of the royal mint. Finally, the *sight deposits* on current accounts are created by the banks.

Yet, the banks need to have a current account at the central bank. These sight deposits of the banks with the central bank are not called sight deposits, even if they are just that, but operational balances. The operational balances together with the cash in the banks' tills are called reserves. The reserves are created by the central bank. They constitute a reserve of cash and of non-cash central-bank-money which the banks can draw upon. Starting from the reserves, the existing money system can be called a reserve system. Historically, government coins made of precious metal were the reserve for banknotes; and all of the cash (coins and notes together) were the reserve for sight deposits. So, until the 1930s through to 1971 when the US-Dollar was definitively taken off the gold standard, the precious metals gold and silver served as the final reserve.

Today, even the Swiss have abandoned the gold coverage of money. Gold has become just another non-ferrous metal such as lead or aluminium. Do not bank on it any more unless you are a speculator in raw materials. Gold is not much more of a security than the coined pieces of non-precious metal and the coloured paper-notes in your pockets. Another silent revolution has been taking place. Cash is no longer a reserve for non-cash money. Things have become inverted: non-cash money, to be more precise, banks' operational balances with the central bank, have become the only reserve for cash in general as well as for sight deposits in particular. The basic type of the money supply has become non-cash money. Cash has become a special form of utilization of money that can be coupled in and out of non-cash money if required. Non-cash money exists as sight deposits on bank accounts (which are used by the public and the banks among themselves) and as non-cash reserves on central bank accounts (which have to be used by the banks in settling their payments to other banks at different locations and abroad).

A further type of money, said to become perhaps more widespread, are so-called cash-cards or chip-money. This is a hybrid of cash and non-cash; it is non-cash money on a mobile sub-account, downloaded from a current account at a bank to the sub-account on the chip-card. The advantage is, you can take it with you and use it like cash, and this moreover in any denomination desired.

In contrast to cash-cards or chip-money, the expression E-cash (electronic cash) is misleading. It refers to IT²-methods of transferring non-cash money from one

² IT = Information and Telecommunication Technology

current account to another. For the time being, this can be done e.g. with an account card (formerly cheque card) at the point-of-sales, or with a home-banking access to the account, or alternatively by giving a direct debit mandate, or by giving a mandate to charge your credit card. All of these IT-ways of transferring non-cash money contribute considerably to accelerating the circulation of money. This has the same effect *as if* more money was circulating. But none of the IT-ways of transferring non-cash sight deposits actually does create money. They just accelerate the circulation of sight deposits created by the banks. In the case of bad debts, any Internet supplier faces the same type of encashment problems which traditional suppliers and credit card companies are already familiar with.

For someone not sticking too much to clumsy materialistic habits it has become obvious that the physical appearance of money has vanished. What is left is the purely informational nature of money that has been there since money first came into existence. Money is a functional tool made of value-informational units, similar to a vocabulary made of meaningful words of which it is in fact a special case. Money is the medium of economic communication, wherein its function is that of a social medium of economic control. Money is the resource of resources, in the meaning that it is the resource for the repartition³ of all other economic resources and itself.

Technically, money needs to exist in the form of a defined currency with defined units (e.g. the Euro, subdivided into one hundred cents, equivalent to about \$ 1.10 in March 1999). With such a currency definition and currency calibration money serves as a useful tool for both (a) pricing and (b) paying prices – which is to say, (a) a tool for measuring economic value, for pricing items such as goods, services, property, assets, and (b) a tool for carrying out economic transactions based on value-equivalence, in taking the priced items against transferring the purchasing power which the money, as the functional general equivalent, represents.

Medieval clergymen and modern writers have been suspicious of money. Money may be beneficial, yet it is also prone to abuse of any kind. Today actually, money is used and misused as the primary means of exerting legitimate as well as manipulative power. This is not by chance. Money is both effective and efficient in performing its task of repartition, i.e. the dividing-up or partitioning of money in allocating and reallocating, distributing and redistributing resources and income. So money indeed is a magnificent instrument of economic and societal control. Insofar as banks and people deal with money, they share a certain co-responsibility for its proper use. The way a person acquires and spends money pertains to this person's share of control over the shape and development of the society the person lives in.

³ Repartition = allocation of economic factors and/or distribution of income.

The bank-created sight deposits in the reserve system. Clearance of deposits, circulation of reserves

How is the creation of sight deposits carried out by the banks? To start with, one can say that banks create sight deposits by granting credit (loans) that do not have to be paid out, neither as cash from a bank's till nor as non-cash reserve from a bank's operational account with the central bank. I remember a story which Freiherr von Bethmann-Hollweg, heir of a Frankfurt banking dynasty, once told. When he was a child, the Bethmann family was out dining at a restaurant. When it came to paying the bill, his grandfather had no money on him. He took a napkin, wrote on it "Bearer will get 20 Reichsmark from the cashier of my bank", and signed the napkin. The story has it that the restaurant owner did not go straightway to the bank, but took fun in paying the florist with the napkin-money worth 20 currency units; and the florist took fun in paying the market garden with the napkin.

The napkin was nothing other than a credit (loan) the Freiherr had granted to himself *and* the restaurant had granted to the Freiherr at the same time. In other words, the napkin was a private cheque or a private banknote that was accepted by everyone because no one hesitated to assume that the issuer was a rich man who undoubtedly would be able to stand to his money promise. Sight deposits, to come back to them, are so to speak x-unit-promises written on napkins that have the form of current accounts; or to put it the other way round, sight deposits on current accounts are money promises on book-keeping-napkins with a general signature of the bank in charge. And, in contrast to Bethmann's napkin, the sight deposits are never really paid out but are continually being used as non-cash money.

In contrast to the wealth of terms usually at one's disposal in English, "credit" can have at least a triple meaning which at some point may contribute to confusion. First, credit can be an abbreviation of "credit balance" in the sense of an amount of money or a stock of capital on an account. Secondly credit can describe making an "entry note" into accounts. And thirdly, credit has the meaning of "a loan". Sometimes it is not easy to identify the proper meaning of "credit" when the word is being used.

The act of creating a sight deposit consists of a double entry in the books; one entry as a credit note on the client's current account constituting a liability to the bank, and another entry that charges the credit account of the bank in constituting a claim on the client. After sight deposits have been *created* in this way they *continue to exist* as a cash credit (loan) which the clients allow the bank, although "allow" is somewhat exaggerated because clients are happy not to have to walk around with bags full of cash or to have to send parcels stuffed with banknotes in order to meet their liabilities. Clients are happy to enjoy the convenience and safety of cashless payment practices.

It should be noted that sight deposits represent money being used by the public, not by the issuing bank; and when the loan is being paid back, the book-entries are extinguished on both sides of the balance sheet, and with that the amount of money

involved ceases to exist. This is the reflux principle dating back to the 1840s when it was stated by John Fullarton, a main representative of the so-called banking school. Theoretically the principle is true, particularly if seen from the micro-economic perspective of an individual debtor. Seen from a more macro-economic point of view, however, the reflux principle is by and large beyond reality because the quantity of money in circulation practically never shrinks as a consequence of the redemption of loans by which new sight deposits were created, but continues to grow through revolved and expanded credit creation by the granting of further loans.

If, as an exemption to the rule, the amount of money shrinks, this is usually not done by orderly redemption but because of unordered illiquidity, bankruptcy and other sad necessities for the complete write-off of bad debts. Then the bank is liable for the money it has granted to the customer and it becomes evident at such a moment that the creation of sight deposits is not another way of counterfeiting. Banks do not create their *own* money, but they create sight deposits which they remain liable for, as a means of payment for the public. Furthermore, banks are not allowed to create the sight deposits in a currency of their own. What they really do is just create a parallel means of payment in the currency of their central bank.

The trick with sight deposits basically is: they represent reserves that have never really to be payed out. In the end it makes no difference if one considers the bank's cash as a reserve for the sight deposit, or the bank's credit on its central bank's operational account as a reserve for both cash and sight deposit. The reserve base involved has not really to be payed out. The reason is that any outflow from the system is simultaneously an inflow to the system.

As a kind of role-play, imagine I am the bank and you are the client. I have reserves of 5 units in my cash-register and a further 15 units on my operational account at the central bank. Together these are 20 units. Now you come applying for a loan of 20 units. I am sorry to say, I do not have enough money for a 20-unit loan, but I can offer you a 10-unit loan; because, from the 20 units I do have, I need, say, 3 for current cash transactions, and 7 for current settlements of liabilities that remain after the clearance in and out of cashless payments with other banks in different regions and abroad. I am willing to lend the remaining 10 units for 7% interest - without committing the crime of counterfeiting or cheating, because I actually do have these 10 units. So there will be no shortfall in my balance sheet.

Now, what are you going to do with the 10-unit loan? You transfer 4 units for the immediate settlement of open invoices of goods and services you just happened to buy. Then you take 1 unit in cash that gives you a good feeling of having money in your pocket, and you transfer the remaining 5 units onto a short-term deposit at my bank for the 2.5% interest you get from me. As a consequence, for the time being the bank needs only 5 units to serve the 10-unit loan (it needs to cash out 1 unit, and it has to transfer 4 units to the operational accounts of other banks where your transaction partners are clients).

Incidentally, some of your partners happen to be clients of my bank too. This means, I do not have to transfer 4 units of my central bank reserves, but only, say, 2 units, because the other 2 units can be settled just by current account clearance within my own bank without moving any money. When all is said and done I only need to pay out 3 units of the actual 10-unit credit. While I am doing so, imagine what happens. Your customers or your employer are transferring money to you, i.e. to your current account at my bank, this week half a unit, next week again, etc.; and while I am paying out 1 unit in cash to you, the shop keeper and the hair-cutter of around the corner and the waiter from next door are coming in to make deposits that may sum up to the 1 unit I am just in train of paying out to you.

At this point in the role-play you can already see what is going on. You took your credit (loan), but that did not really affect my money reserves. The money came back to me soon or stayed with me from the beginning. In spite of the fact that my bank has enjoyed a lively turnover of cash or cashless payments in and out, the actual money base the bank operates on did not change very much at any time, and in the end it did not change at all. As a result, however, 10 units of sight deposits have been created and the quantity of money in circulation in the role-play has risen from 20 to 30 units. The next round of granting loans starts from these 30 units and will add more to them, etc. In this way the banks expand the quantity of money, i.e. the quantity of sight deposits in circulation by credit creation.

The bigger banks are the more the example holds true, i.e. the more volume in turnover banks have, the more clients they have, the more payments are made in a cashless way, the more often the money circulates for purchases and loans, and the faster the cashless transfers are done technically. If you think for a moment of the banking sector as if it were just one huge mega-institution, then any expenditure in the banking sector is an intake of the banking sector, and any intake in the system is an expenditure of the system. In this way any sum as an outflow is not only equal to, but identical with the same sum as a simultaneous inflow. The specific sum may be an outflow from your particular account going as an inflow to my particular account, but for the system it is just an inside flow, an internal turnover. Not one cent goes out of circulation unless you bury it.

In former times burying coins was an unlawful but common practice in order to hide the gold and silver from intruders and royal tax collectors. Buried or otherwise hidden money is out of circulation for a while, thus weakening economic turnover by weakening the flow of currency. To keep very scarce and precious money circulating was a major economic concern throughout the metal-money ages. Today one does not need to worry about money circulation any more, because money can freely be created if required, and because the cashless transactions and transfers carried out by the banking system with the help of interest-driven financial markets mobilize whatsoever money incessantly. Non-cash money cannot be buried any more – and burying the money is no longer among the public's liquidity preferences, except for bank robbers, because we prefer either to spend our money immediately or to invest it short- or long-term. So the revenue of-

fice, much the biggest brother I know of today, has little trouble. Sometimes I wonder if the only reason for still using cash is to give pickpockets and moonlighters an opportunity to earn their living.

The interrelation between the reserve base the banking system works on, and the sight deposits the banks create, is not easily understood. If you consider (1) the banks' reserves of operational deposits with the central bank, (2) the cash reserves and (3) the sight deposits as three specific kinds of means of payment, then the real divide is between the banks' reserves of operational deposits with the central bank on the one side and the sight deposits on the other side. Non-cash reserves are strictly central-bank-managed, whereas sight deposits are strictly bank-managed. Cash is handled by everybody as required. Forget about the cash. Cash is just a traditional slow type of means of payment, coupled out of and back again into the non-cash money, be it the central-bank-managed non-cash reserves or the bank-managed sight deposits.

The decisive relation is the one between the banks' operational balances with the central bank (non-cash reserves) on the one hand and the clients' sight deposits with the banks on the other. The quantity of the non-cash reserve base is just about 5 – 10 per cent the quantity of sight deposits. Seen in a set-theoretical way these 5 – 10 per cent *represent* a subset of the quantity of sight deposits, but actually they *are not* a true subset of it. The important point there is to understand that - contrary to intuitive assumption - the sight deposits are created and exist rather independently from the banks' reserves on their operational accounts. The central-bank-managed reserves (the banks' operational deposits) and the bank-managed sight deposits constitute two completely different money flows that do not at all mingle. There is no direct exchange in-between the two. Simply, among the bank accounts at the central bank, relatively small reserve payments back and forth have to be made that remain after the cashless clearances among the banks have been completed. With a suitably timed succession of crediting and redemption steps, the banking system is able to create any sum of sight deposits as well as any sum of capital deposits on any small reserve base.

This situation does have important political implications, and there is an equally important commercial impact too. We will come back to both of these. At this point just one aspect should be clarified: Through the creation of sight deposits the banking sector creams off a considerable extra profit because these credits (loans) are for zero debit-interest to the banks who charge their loan-taking clients the full capital market credit-interest. So their profit as to this fraction of the business is not, say, 9% credit-interest less 4% debit-interest = 5% normal margin gain, but 9% credit-interest less 0% debit-interest = 9% margin gain = 5% normal margin gain plus 4% margin extra profit.

Therefore, the Chicago group of economists in the 1930s, among them Jacob Viner, Henry Simons, Frank Knight, Paul Douglas, and later Milton Friedman, proposed that demand deposits become interest-bearing for the depositor. They got it wrong. You would not expect the coins and banknotes in your purse to be interest-bearing. Why then should sight deposits as means of payment be interest-

bearing? Interest is paid on the loan, for temporarily transferring purchasing power, not for the money. That is why the proposal to pay interest on sight deposits is flawed. The banking system creates the sight deposits *ex nihilo*. In *nihilo* there is nobody who credibly could make a claim to being paid interest. Many people think their bank "is working with their money". This is also a misconception. A bank is not allowed to touch a client's deposits without having an explicit client order to do so. There may be tricky things to be found in the banking system, but there is no double use of items, nor any clandestine routine practice. Everything is legal, under the control of the authorities and comprehensible, albeit not easily comprehensible so that even for the banks the creation of sight deposits usually goes unnoticed, because bankers are commonly not aware of how they manage to create most of today's money base.

The legal and institutional side of converting reserve money into plain money (role of central banks)

Money and the monetary system are part of societal and economic evolution. There is some structural change from time to time, change of innovative unfolding as well as readapting to changing external conditions. To be brief: Monetary stone-age and metal-age are over now. The 500 –700 years old metal-money reserve system is no longer contemporary. It is in need of overhaul. Within the traditional reserve system the creation and circulation of money is an unnecessarily complicated and non-transparent matter, and it is much more expensive than you probably realise.

Because any metal-money standard has definitively been abandoned in favour of money as a purely value-informational unit, money is created by the banking system freely *ex nihilo*. I repeat: freely *ex nihilo* at need and will. So the complications of the traditional reserve system are no longer necessary, even if some of the actors in the arena possibly do have an interest, interest indeed, in keeping things non-transparent as they are. With the abdication of any metal standard, the reserve system as such can be abandoned in favour of a much easier and the more efficient way of creating and circulating money.

The way in point is plain money, i.e. make sure that all money in circulation consists exclusively of central-bank-issued means of payment in the form of non-cash money, notes and coins (as long as notes and coins stay in use). "Plain" expresses several characteristics of the modified money: It is just one kind of money, from a single source, no longer mixed with others; it is of a purely informational and functional identity emancipated from any material things of value; it is issued into circulation in a clear-cut amount wanted and known in advance (not, as today, where it only becomes known much later at which point it might be unwanted and too late); and this is done under conditions of unambiguous and transparent institutional responsibilities.

Central-bank-issued plain money *is* present money by itself and does not represent reserves anymore; because it is a fully valuable means of payment in any

form, issued freely *ex nihilo* by the central bank corresponding to the needs of the economy and in accordance with the state-of-the-art knowledge of economics. Central-bank-issued plain money, as the functional general equivalent, cannot have and does not need any "coverage" in stones, metals, land, or whatever kind of "reserve". The only coverage money and its purchasing power has, as well as the only security of the value any property or capital has, is the current economic product of the nations and its successful reproduction. So the purchasing power or transaction value of money solely and simply comes from hard work and productive capacities based on skill and knowledge.

Plain money is not an arbitrary invention. Non-precious coins and banknotes since they were declared to be legal tender are nothing else but plain money. Sight deposits however, by far the most important means of payment today, are not plain money yet. They are used as if they were money, and *de facto* they have become the dominant (non-cash) kind of money; but *de jure* they are not legal tender yet. The proposal can be reformulated: In addition to coins and banknotes sight deposits should also be transformed into plain money by making them central-bank-issued legal tender. The step from mixed reserve money to plain money is the next obvious step in the evolution of the modern monetary system.

Central-bank-issued plain money would be identical with the total amount of money in circulation. There would no longer be these misleading aggregates called M1, M2, M3, or similar, but simply the one amount of money M circulating easily and freely from everywhere to anywhere for whatever purpose money is allowed to serve. The amount of money in circulation or the money base (today M1) and the currency base (today's central bank money) would become identical. It might serve to clarify then to call M no longer the money supply but just the money base, and to confine the terms supply and demand of money to the financial transfer processes among banks, between banks and the public, and among the public. There money is demanded in order to finance that part of necessary income the actors have not been able to meet by own means, and thus want to have transferred to them as a loan, subsidy, allowance, or donation. Complementarily, the counterparts supplying the transfer money would not supply all of their income, but just that part they feel able to or that is enforced by the law and the courts.

The three domains which govern where and how the supply and demand of money take place are (1) financial markets, particularly foreign-exchange markets and those for building up savings or money capital or portfolio capital, (2) the public redistribution of money through taxes and welfare contributions, as well as the micro-structural private redistribution of money e.g. when cross-funding within corporations, (3) the sharing out of money at community-level in the context of family, kinship, friendship, partnership, neighborhood, charity etc. To get straight the difference between the money base and the money supply (= capital supply) in today's reserve system remains a difficult and ambiguous endeavour. The difference will clear up automatically once the step to plain money, and steps to issuing the money in a non debt-constituting way, are taken.

The legal way to bringing plain money into existence is the creation of a general prerogative of money creation for the central bank encompassing the definition of one single currency on a territory, the exclusive creation and absorption of non-cash money and cash in this currency, and the admission of foreign currencies on the territory. In practice, such a prerogative already does exist, except with regard to non-cash money. The plain money proposal is not about grafting unheard of ideas on to the monetary system, it is about overhauling and completing well-established practices. E.g. in the EU, article 16 of the statute of the European System of Central Banks could read:

Art. 16 – Legal Tender - ... The Governing Council shall have the exclusive right to authorize the issue of legal tender within the Community. Legal tender are coins, banknotes, and non-cash money. The European Central Bank and the national central banks may issue such means of payment. Coins, banknotes, and non-cash money issued by the European Central Bank and the national central banks shall be the only means of payment to have the status of legal tender within the Community.

As an institutional implication of the general prerogative of money creation, central banks definitively cease to be the private businesses they once were and become exclusively what they already are: a public authority central to the monetary system in creating and regulating the money base. In order to be able to fulfill this task properly, the position of the central bank in monetary policy needs to be a strong position of power-separated and power-balanced independence from governments and other players, comparable to the degree of independence the courts were given in jurisdiction long ago.

The monetary technique of converting reserve money into plain money

In addition to the legal and institutional aspects of plain money there are aspects of organisation and monetary technique, particularly accounting procedures too. The step from reserve money to plain money entails the transformation of current accounts or checking accounts into money accounts, which means, the entries in these accounts are no longer sight deposits representing reserves, but they *are* present money: plain non-cash money. The transformation of current accounts into money accounts can be done, again, by a simple legal declaration. The declaration that sight deposits would become plain money as from a set date on has no consequences at all for the owners of the accounts. No one's monetary possessions, including the banks', will be touched. There will be no expropriation, nor any other sudden change of existing means.

One thing, however, may be different, and a second certainly will be different. The may-be concerns the question of how cashless payments are carried out. Today this involves a complicated process of clearances among banks, their higher-level central offices, central banks, and final payment back and forth among banks' central bank accounts. Double-entry bookkeeping of course has to be continued; however, parallel administration and accountancy of the same payments – one at the banks' offices, a parallel one at the central bank offices – can be given up. Banks do a perfect job in managing cashless payments. It is certainly not an extra

profit-spinning service, nevertheless it is a viable part of the service business of banks. The public would continue to have their money accounts at a bank, and the banks would continue to have their money accounts at the central bank. Let banks do the account-managing for the public, and let the central bank do only the account-managing for the banks' *own* cashless payments. There is no problem of control. Being mistrustful here is out of place. There is enough bureaucracy around.

To understand the second thing which will certainly be different takes a little knowledge of accountancy: From the set date on, the sight deposits are no longer a cash liability of the bank to the client, and no longer a cash claim of the client on the account-managing bank. Since from the set date the sight deposits become plain non-cash money and the clients become owners this money, their claims are fully satisfied at once. In contrast to the situation today, the sum of the clients' current accounts will no longer appear in the balance sheet of a bank, just as the stocks and shares a bank may be managing for a client are the client's, not the bank's. In the same way, a bank runs just its clients' money accounts, and manages the cashless payments which the clients actuate. But the money is the client's money, and it no longer represents an asset or liability of the bank to the client.

The sums of non-cash money would nevertheless continue for a while, during a transitional period, to be part of a bank's balance sheet. Instead of being a cash liability of the bank to the client they would become a credit liability of the bank to the central bank. That is exactly it what today's sight deposits are about: Means of payment circulating as money created by the banks in de facto taking on the role of the central bank. The conversion from reserve money to plain money is about re-writing the books as if the sight deposits had been issued by the central bank from the beginning:

From the set date on, the credit sums would remain on both sides of the bank-client-relationship, as the money sums would disappear on both sides while re-appearing as an entry on both sides of the central bank-bank-relationship. To say it again in similar words: the credit claims of a bank on the loan-taking clients remain; the cash liabilities of a bank to the account-maintaining clients disappear, and the cash claims of the account-maintaining clients on the bank disappear equally; in exchange for the latter a credit claim of the central bank on the bank appears. These credit claims would be part of the assets on the balance sheet of the central bank, corresponding to the sums of non-cash money being registered on the liability side (neither of which are the case today).

Let us briefly take a further look at the central bank balance. If, for the moment, we start from the familiar assumption that money is issued through central bank loans to banks, then on the asset side of the central bank's balance sheet there are firstly the foreign currencies, and secondly the debt securities or whatever the money-creating central bank accepts as a document of its claims on the banks that are taking the money as a loan. Gold would no longer be found among the assets of a central bank, otherwise one could also include lead, aluminium, pork bellies and orange juice. On the liability side of the central bank's balance sheet - as is the

case today, but more completely and consistently so - there would be the sums of the total amount of money supplied, issued as non-cash money, banknotes or coins.⁴ One should think about on this occasion if "asset/credit" and "liability/debit" are still appropriate terms for the meaning of the monetary items entered into a central bank's balance sheet concerning the creation and regulation of the money base. The central bank already is, and will become more completely so, the only institution authorized to spend money without having taken it in before.

In converting sight deposits on current accounts into plain non-cash money, thus converting cash liabilities of the banks to the clients into credit liabilities of the banks to the central bank, the banks can be given preferential conditions in order not to disrupt current business, e.g. a convenient conversion period of 5 - 10 years, perhaps very low or zero interest rates for this transitional part of their liabilities, and the option to redeem at any time or according to an individually negotiated redemption plan. As a result, the banks would have to redeem continually these liabilities at the central bank to the degree the banks themselves are continually paid back loans by their clients. So the conversion of sight deposits into plain non-cash money is not a question of additional burdens on the banks, rather these liabilities are simply a continually diminishing run-through position until they have come down to zero, thus having phased out any remainder of reserve money. In exchange, if banks were in need of new money, they would have to take it up by new borrowing at normal conditions through any of the channels available to the banks.

It follows from this, with regard to the question of whether a plain money reform would involve a "big bang" or be a continual process, that there would be a "big bang" with an ensuing transitional period of phasing out old loans. "Big bang", though, is a rather dramatic word for a rather undramatic measure which would leave institutional and market structures untouched and which would remain completely unnoticed by the money-using public if it were not informed about it. The "big bang" will be visible only to the banks and the central bank because of the slight reordering of their books at the set date. The continual transition period then consists of the ensuing phase-out of old loans by paying them back via the banks to the central bank at an amount identical with that of sight deposits which have been existent at the set date. So the transition period would not be a "process" in the sense of permanent restructuring, but simply a continual phase-out of old

⁴ One may ask whether (a) the corporate assets and liabilities of the central bank as an operational body, (b) the money-creating activities and (c) the money-regulating activities (e.g. redeemable money-absorbing by repo transactions) should all continued to be included in one balance sheet. It could possibly be more reasonable to separate at least (a) from (b) and (c), and to handle the entries of (c) in a different manner, i.e. subtracting temporary absorptions instead of adding them. The result would be a business balance apart from a balance of creation and regulation of money, the latter showing a balance total identical with the amount of money in circulation. Introducing such modifications in the book-keeping of a central bank presupposes an advanced understanding of the authentic role and functions of a central bank as being different from usual private or public banks, businesses and households.

loans up to the point where the traditional credit base for yielding *extra* profits will have been dissolved.

Why banks will not be able to continue creating sight deposits

Within the traditional reserve system banks cannot be prevented from creating credit (sight deposits). "Forbidding" banks to do so would not be feasible. There was, nevertheless, one attempt to do it, known since the 1930s as the plan of an obligatory 100% cash reserve on bank deposits, in other words, to raise minimum reserves, which used to be about 5 – 15 per cent in most countries, up to 100%. This plan will be discussed later, but it should be noted here that it was unnecessarily complicated, theoretically inappropriate (unclear money concept, lack of distinction between money and capital/credit) and backward-looking, actually conserving the obsolete reserve system.

By transforming current accounts into money accounts, i.e. reordering the books as explained above, the matter would be settled once for all. Banks need not be "forbidden" to create sight deposits. They would no longer be able to, because as a direct consequence of converting sight deposits into plain non-cash money bank loans will be paid *out* to the customer's money account. These money accounts will no longer be part of what is today the bank's general current account of clients. The latter will cease to exist, or would become a separate statistic of the sums managed for the clients. The plain non-cash money on a money account will in no way be part of the bank's balance sheet any longer. Money that has been lent to the bank would appear on the bank's own money account (today's operational account) with the central bank.

The capability of today's banking sector to create sight deposits is based on the fact that only very small proportions of the sight deposits have actually to be paid out, be that in cash or in central bank reserves. Under conditions of plain money banks can no longer avoid paying out what they have granted – from their own money account onto the customers' money account. Paying out the total amount of a loan, either in cash or in non-cash to the customer, and furthermore actually transferring the non-cash money of any cashless transfer order from any client's money account to any other, achieves in fact what a 100% reserve wanted to simulate artificially.

Banks could try to create loopholes. E.g. they could try to reinvent sight deposits as, say, "virtual deposits" on "easy accounts", perhaps made attractive by being interest-bearing to the customer. One could expect such an attempt to fail. The public would probably not accept these virtual deposits as regular means of payment, just in the same way as e.g. Eurocheques are not accepted as a substitute for legal tender bills, even if the drawer of paperless virtual deposits was a bank, not a private person.

If this outcome appeared doubtful the best course would be to make sure that today's cashless payment practices are continued. Today, cashless payments have

to be carried out by charging current accounts. Payment by transfer of short-term capital (such as savings deposits or fixed-term deposits) is usually not accepted. It should be the same in the future with money accounts. To ensure this, payment by transfer of short-term capital could be interdicted formally. The possibility of passing the property rights of any stock of capital would not be affected. Payment in capital, however, shall not, and certainly will not for reasons of practicability, replace regular transactional payment in money.

Another common practice, which should even be generalized in the future, is that of setting minimum terms for borrowing, e.g. the widely adopted four weeks notice as a minimum for fixed-term deposits. Banks could try to create a substitute for the current-account-mechanism by contracting *very* short-term borrowing from their customers. This means, banks would obtain permission to withdraw money from their clients' money accounts any time to the degree that there is currently money on them, on the understanding that the bank will pay back instantly any sum on the customer's demand. Actually, that it is what many people erroneously think the banks do with their sight deposits. But banks are not allowed and do not need to do that within the present reserve system. Of the sight deposits which people consider as their money, at worst about 5% have really to be paid out in reserves. In contrast, under conditions of plain money, banks would have to pay out all of the money. Then they probably would try indeed to do what people think they are doing at present. In this case any type of *very* short-term borrowing, especially between the banks and the public, should actually be interdicted formally. This will be discussed more fully in the chapter on the financial circulation of money, and on minimum term setting as a new monetary instrument to replace the traditional instrument of minimum reserves which is no longer applicable.

Objections to plain money concern its supposed consequences for the flexibility of the money supply and profitability of the banking business. At stake, however, is not the profitability of the banking business, but only its in-built *extra* profitability which stems from the creation of sight deposits *ex nihilo* – to everybody else's cost. Yet, as compensation for this loss, banks would very probably be able to increase business turnover, because firms and private households would be enabled to save money and to build up considerable stocks of their own capital at low levels of interest rates. At the same time they would become ever more responsible for funding their activities themselves. Firms and private households will combine creditworthiness with a variety of credit requirements and so will surely be good credit clients and portfolio investors. In the end even the banks may possibly derive pleasure from plain money.

The conversion of sight deposits into plain money will in no way hamper the provision of money and the adaptability of the financial markets. The existing means of payment will stay in circulation, and the central bank will continue to provide new money according to state-of-the-art projections concerning the potential volume of necessitated quantities of money. So there will always be enough money in circulation, neither too little nor too much, hence enough money will always be supplied and demanded at the short- and long-term capital markets too.

But it will be the central bank that provides all of the money, whereas the banks will no longer be able to create a parallel means of payment of their own. Banks will no longer be credit creators, simply money brokers. They will themselves have to take up the money before they can do business with it. Banks would continue to have the freedom to grant loans, and these could still be called credit, but banks would only be able to grant loans or credits to the degree that they have had previously obtained this money from their clients or other banks or even the central bank – against customary interest. And banks will never hesitate to take up money as long as the business they want to do holds out the prospect of a viable profit margin.

Consider private overdrafts. While a client is making use of one, additional new sight deposits are being created. Under conditions of plain money this could technically no longer be done in the same way, but in practice it would be carried out in a similar way and with the same result. In a comparable arrangement banks would have to make sure in advance that they actually possess as much money as would probably be demanded through overdrafts, the amount of which is calculated on the basis of experience and stable trends. Planning for this does not constitute a complication since today banks also need to prevent shortfalls in their balance sheet. Hence relentless short-term and very short-term borrowing on the interbank money market. Short-term borrowing on the interbank market will certainly not have to be interdicted to the same extent as on the public market, but even if *very* short-term borrowing there were interdicted too, that would not be a hinderance. Banks would have to make provision for borrowing over a slightly longer time period. This could diminish the profit margin of the overdraft business, but not squeeze it. Today, the credit-interest on an overdraft is at about 10 – 15%. If banks had to pay a complementary debit-interest of, say, 4 – 6% on all of the money involved instead of today's debit-interest of next to 0%, one would consider this as a normalization of the banking business rather than a threat to it. Overdrafts are in actual fact a good example of how *extra*-profits at the expense of others would be cut whereas normal profits would continue to be possible and welcome.

As to the prices for banking services, particularly prices for running an account and carrying out cashless payments, there are considerable differences between different countries. For example, with most of German banks service fees are cost-covering prices, whereas today in the United Kingdom there are for the most part no more fees at all. So, converting current accounts into money accounts is definitely no excuse for raising the prices for managing accounts in Germany, but it could trigger the reintroduction or the raising of such prices in the United Kingdom. On the basis of higher levels of net income and increased interest-intake from capital owned, such prices should be acceptable to the public. In principle, such overt prices are required because they help to make a clear distinction between the real-economic services of financial institutions, and the not so transparent financial transfers they are taking in, a topic which will be discussed in the chapter on matters of interest.

Currency versus banking. The currency school as a forerunner of the basic principles of plain money

Before continuing, let me briefly come back now to the story with the napkin money. Banker Bethmann's napkin is a pure illustration of the banking theory of money as opposed to the currency theory, a controversy dating back to around 1830/40 in Britain (O'Brian 1994, Vol. IV, V). The questions in point here are as much of a political nature as they are academic. The controversy between the currency and the banking school is not just about truth with regard to a given reality, it is as much about shaping monetary realities according to the truth the actors want to see established. Seen from today's standpoint I would like to reformulate some of the core arguments of the controversy as follows.

The banking school supported a concept of money that can be described as the continuum thesis of money. It maintains that you never know what money really is, because in a given situation anything might serve as a means of payment, be it a napkin, or be it cigarettes in a prisoners camp, or beautifully designed pieces of paper, or any other document of debt which money-men, short of money but long on ideas, may come up with. Business in general and the banking sector in particular themselves create as much money as they need. They never create too much money, because paying interest is expensive, so credit is only taken if really necessary, and only given if the creditworthiness of the debtor has been approved.

There is a chain of money claim references. The chain can be seen when looking at how the assets on the balance sheet of a bank are arranged: gold is still there first, second come coins and banknotes, being cash, after them overnight deposits (sight deposits), still being full liquidity, followed by short-term savings and fixed-term deposits, representing so-called near-money, up to different kinds of longer-term capital deposits, thereafter to claims that are very long-term, other ones that are practically irrecoverable, and finally older equipment almost written-off. The currency school agreed with that, maintaining however that these types of money and capital do not constitute a continuum with blurred transitions, but a hierarchical spectrum with notoriously discrete dividing-lines in-between. You trust in this kind of discretion and clarity when putting money into a bank, and you would not accept a blurred identity of your claims and liabilities.

In addition to that, if there is this chain constituting a spectrum from plain and pure liquidity via near-money-capital and far-money-capital to complete non-liquidity, then there must be a monetary item referred to in the first and last instance, an item being the true currency or the hard core of it. Money cannot be regarded as being any of the sheet-entries listed above. The dividing line between money and non-money (or capital) was considered to be identical with the difference between cash and non-cash. Today, the dividing line is between M (full instant liquidity), approximately M1, and the rest which is short-and long-term capital. Near-money is short-term capital. If everybody canceled the near-money contracts at the same time, the system would collapse in just the same way as it would if long-term con-

tracts were canceled. And if everybody wanted to literally cash in sight deposits at the same time, the system would equally collapse - revealing the Janus-faced character of sight deposits as being money and short-term capital simultaneously.

Furthermore, recurrent over- and undershooting of the money supply as a consequence of too much or not enough credit creation, causing or reinforcing economic instability and bank failure, are proof of the self-regulation of the money supply by credit creation not working properly. The currency school's concept of money can be called the identity thesis of money: There is or should be one single public currency, with a clear definition, circulating in a clear-cut amount, under conditions of clearly regulated institutional rights and responsibilities.

In their time, still part of the metal-money age, the currency school considered gold as the hard core of any viable currency. They delivered the theoretical foundations of the Bank Charter Act of 1844, known as Peel's Act referring to the then prime minister. The bank charter (it could have been called the money charter as well) introduced the full gold standard of the British Pound that was maintained until 1931. Although the plain money proposal put forward here is just the opposite of going back to the gold standard or to any other standard based on material objects of value, it can be said that the plain money proposal implies, and contributes to, a modernisation of currency theory, and moreover is opposed to any position in banking theory which presumes to create its own means of payment or even its own currency.

The power shift from central banks to banks

Let us come back now to the sight deposits and the cashless payment practices of today, and to the fact that within the current half-traditional, half-modern reserve system there is no measure to prevent banks from creating sight deposits. If central banks require the banks to hold minimum reserves at the central bank, reserves that are non-available as money base for the current operations of a bank, this just constitutes a hinderance, not a preventative measure, because it merely forces the banks to spend a somewhat longer time building up their claims and liabilities of sight-deposits-creating loans. With regard to monetary policy such a delay may be either helpful or harmful to the business cycle. And the measure only allows for some influence. It does not mean that the central bank has control of the money supply. The control - as a matter of fact - is increasingly with the banks.

Central banks have decisive control neither of the quantity of the money supply nor of the interest rates steering the creation and retransfers of sight deposits on the financial markets. Some central banks are still among the important market makers, especially the Federal Reserve of the U.S. responsible for the US-Dollar, the European Central Bank with the Euro, and the Bank of Japan with the Yen. However, while they keep issuing cash for the benefit of pickpockets and moonlighters, they are no longer the true trend setters they are supposed to be in the money and capital markets, nor do they play the authoritative role in which they love to be seen.

There are a number of interrelated developments that cause the control leverage of the central bank to become ever shorter. First, the cashless payment practices in relation to cash payment are expanding increasingly, and second, the cashless transfers are carried out electronically on-line and in real-time and ever faster around the globe around the clock. These two reasons, the first economic, the second technical, are intertwined and reinforce each other. The reinforcement is furthered by, third, the globalization of the economy with open boundaries and far fewer if any restrictions on international money and capital transfers. Globalization, however, is a secondary cause here. Basically it is the cashless payment practices as such combined with the electronic technology of the information age that are catapulting the monetary system into new dimensions and constitute by far the most important factors for the currently dwindling importance of the central banks.

Cash is being carried around on foot, or perhaps at about 30 mph in these armoured nostalgia cars called money transport. Non-cash money travels at the speed of sound or light. If you take a look at the so-called equation of exchange, you can see why any acceleration of the circulation of money has the same effect as if the amount of money was expanded:

$$M \cdot V = \sum P = T \cdot \bar{P}$$

- M = the amount of money in circulation
- V = velocity of circulation = the average frequency of money utilization per unit of money during the period
- $\sum P$ = total sum of prices paid in the period
- T = number of all transactions = number of all payments made during the period
- \bar{P} = the average price = the general price level, conceived as the mean price of all transactions.

The left side of the equation includes the money, whereas the right side contains prices and payments, i.e. the turnover in transactions carried out with the amount of money in circulation. Instead of e.g. doubling M (say, from $1M \cdot 11V = 11\sum P$ to $2M \cdot 11V = 22\sum P$) one ends up with the same result in doubling V ($1M \cdot 22V = 22\sum P$). Changes of the amount of money and changes of the velocity of circulation have inversely proportional effects on each other. In order to carry out a number of payments summing up to a certain volume, one needs a much smaller base of circulating money when using swift cashless payments instead of circumstantial cash payments.

According to the figures given in the monthly bulletin of the European Central Bank (table 2.1 there) the ratio between cash and non-cash in the central bank's money supply still is about 4 units cash to 1 unit non-cash. Banks do not need a large non-cash reserve base to operate on. But if you consider the entire amount of money M1 (table 2.4 there), the ratio between cash and non-cash has been *reversed* and comes to about 1 unit cash to 4.5 units non-cash. In addition to that there is the multiple speed of cashless turnover compared with cash. So the non-cash money has to be multiplied by 2, 3, 4, etc. And that is why cash-supply and the role of the central banks are bound to be dwarfed by the big credit institutions

which will hardly be in need of central bank reserves any more if things continue as they are.

Against this background, the ever more pronounced focus of central banks on interest rate policy appears as a bad substitute for lost ground in monetary quantity policy – bad, because interest rate policy is of little practical value, and conceptually misleading and mystifying. Even if central banks were the defining market makers – which is questionable indeed – there is no individual market participant who would be able to really determine the dynamics of interest rates. The up and down of the entire formation of interest rates is part of a self-regulating market cycle much too complex to be influenced even by big market makers. The central banks have to readjust like anybody else who has to follow the market. The difference may be that a rise or lowering of central bank rates has the meaning of an official ratification of what everybody already knows and acts according to, i.e. that interest rates are slowly or rapidly going up or down. The idea of central banks steering or counter-steering the course of the business cycle by changing central banks interest rates is voluntaristic mischief, close to the image of the dog wagged by its tail.

The more the role of central banks is mystified in public discourse as the authority supposed to control the quantity of money and the interest rates, the more the central banks actually lose control and banks take over. The role of the central banks is being mystified because the illusion of having strong and reliable guardians of the national monetary values is soothing to a democratic public that otherwise could feel concerned – about their money, about autonomy of initiative and free choice in the economy, and about democracy in general. Another reason of uncertain importance may be that any time a central bank president gives a dinner speech, or any time a central bank's board meets, the event serves as an excuse for market analysts to make market participants anxious about their trading positions, thus generating turnover from noise trading.

With these considerations concerning the amount and velocity of sight deposits in circulation, we have entered into the midst of the economic and political problems to which the plain money proposal is a solution. The basic political problem here is the power shift from the central banks, which are public national or transnational institutions, to the banks, which are private businesses going increasingly global. So the power shift is about replacing the public central bank leadership in monetary policy by the leadership of private global finance capital. Specific economic or financial problems are closely related to this and follow suit. Financial crises in different parts of the world have recently been arising with greater frequency and seriousness. This can be taken as evidence that the power shift from central banks to banks also implies a shift to more economic instability, particularly overheated business cycles on real-economic as well as financial markets. Banks are prone as ever to create new sight deposits and thus expand at will the money supply beyond control, or to refuse fresh money and dry out the economy to disaster. Plain money is not a cure-all to that. But if society and politics want to solve the problem, plain money will unavoidably be a part of the solution.

Historical approaches

Those familiar with the history of monetary theory may recall the 1930s, when during the Great Depression with its collapse of investment, of banks and fortunes, the future of the banking and reserve system was at stake, and a couple of reform ideas came up, among them the concept of stamp scrips invented by Silvio Gesell (1919) that gained resonance in Europe as well as in the United States, and, more importantly, the concept of 100%-money by Irving Fisher (1935) and the plan for 100%-banking, called the Chicago plan after the group of Chicago economists already mentioned (Simons 1948, Friedman 1948). Another influential monetary reform concept of the 1920s and 30s was debt-free social credit by Clifford H. Douglas. A more recent contribution is that of a general public prerogative of money creation put forward in the 1970s by Pahlke and Gocht independently from each other.

Stamp Scrips (Gesell)

In order not to get things mixed up, I want to stress that the plain money proposal put forward here and the concept of stamp scrips by Silvio Gesell have nothing in common at all. Stamp scrips are an artificial construction alien to any "organically" developing economy. Gesell was driven by a preoccupation - shared by John Maynard Keynes (1936, 298pp.) who well-meaningly referred to Gesell - typical of the metal-money age, a preoccupation that already in their time no longer reflected reality: how to get money circulating instead of staying idle. Gesell's idea was to achieve the circulation of money by perpetually devaluing the money at a rate of one thousandth per week, which sums up to about 5.2% per annum. This may be considered as a kind of artificial grease-rate of inflation. If people know their money is going to lose purchasing power, they will spend the money now rather than later - an idea that has fortunately never been put into practice outside of small local experiments, e.g. in 1932 in Wörgl, Tyrolia (Schwarz 1951, Suhr 1989). Keynes' preoccupation was basically the same and his idea of how to achieve the continuation of money-spending was to make the government spend the money by deficit - an idea that unfortunately became widely practiced and led to an age of inflation and governmental debt which undermined or even depressed what always remains the primary economic activity behind any other repartition of resources, i.e. both private and public investment in real-economic enterprises.

Gesellians unswervingly continue to consider the success of the Wörgl experiment as proof of the feasibility and efficiency of stamp scrips. Immediately after injecting the money into local circulation, economic turn over started to boom and unemployment came down rapidly. However, it never occurred to the Gesellians that what produced the economic miracle was the sheer existence of money, in a currency the community had officially adopted, whichever that be, rather than the existence of value-losing stamp scrips. Any injection of official central bank money would surely have done the same to the community which was in full possession of resources, skills and productive capacities, but simply did not have enough money (Huber 1998, 381pp.). Much of the gold reserves had been taken away from the central banks of Austria and Germany, and the central banks'

boards stubbornly refused to "print" money without gold-coverage. So the real economy dried out. Later on, after the National Socialists had come to power, central banks were less reluctant.

100%-money (Fisher) and Chicago plan (Simons/Friedman)

The proposal of 100%-money or 100%-banking was a more substantial contribution. The intention was to do away with the uncontrolled and uncovered creation of sight deposits by the banks, which was taken as the main culprit behind the devastating instability of both money and the business cycle. The plan wanted the banks to be forced to hold a cash reserve of 100% on any sight and savings deposit. Thus, these deposits would become again the true and safe money deposits they used to be in medieval Italy and later on throughout Europe in the early modern times. One would have the convenience of cashless payment without the fear that the money could disappear somewhere else. Furthermore, the monetary authority issuing the cash for 100%-coverage of deposits would be in full control of the money supply.

As it is often the case when an idea is in the air, there are several authors who can claim to have come up with it independently of others. Among them was Frederick Soddy, a Nobel-price winning British chemist researching into radioactivity. He expressed the idea in 1926 in the article *Wealth, Virtual Wealth and Debt* (Barber 1997, 3). Two years later, Ludwig von Mises, one of the leading minds of the liberal Vienna school of economics, published the same idea (1928, 81). In 1934 Lauchlin Currie put forward the concept in his doctoral thesis at Harvard university, referring in his turn to ideas of an economist by the name of Boström at the University of Texas (Hart 1935, 437). At the same time, Irving Fisher as well as Henry Simons and the Chicago group had started to work out the concept in more detail (among others see Barber 1997, Fisher 1935, Simons 1948, Friedman 1948, 1959, Hart 1935). They became identified with the 100%-plan.

Despite having a high regard for Irving Fisher, and due respect for the Chicago group and Milton Friedman, I cannot refer to them in a completely positive way with regard to the monetary issues discussed here. The 100%-plan too was ill-conceived in a number of aspects. Fisher as well as Simons and Friedman had obviously not yet accepted the purely informational nature of money as the functional general equivalent for transactions and transfers of all kinds of economic resources including money itself, and they did not see clearly enough that the only and true source which the economic value of money comes from is the successful reproduction of the current economic product on local, national and international levels. They referred to money as being cash, and Fisher referred to cash as "actual physical money" (1935, 62). They wanted to put cash into the same traditional role gold once played, which is as unrealistic as it is theoretically confusing.

Besides, they neglected some not unimportant details. E.g. they made no clear distinction between sight and savings deposits, thus remaining trapped by the typical banking-theory mistake of not seeing, or refusing to see, the difference between money and capital. How should banks, under the 100%-plan, have been able to pay interest on savings if they were obliged to keep that money 100%, which means

the same as not being permitted to make use of that money to grant loans. As another example, they had not thought carefully enough about how to organise the conversion to the new system (Hart 1935, 448pp., Gödde 1985). According to their own analysis, only 10% of the sight and savings deposits were reserve-covered, but should be covered at 100%. So 90% in cash reserves were missing. Where should the banks have taken that money from? They could not even have stolen it. If the Central Currency Board, a new institution that should have replaced the Federal Reserve, had created and left that money to the banks against interest, the banks could not have afforded this. Leaving the cash to the banks as a gift, which was finally the possibility favoured by the Chicago group, was in principle a good idea, but one seemingly beyond the imagination of politicians and the public.

In addition, Simons and Friedman took a quite technocratic stance towards the role of the central bank and the question of how much the optimum amount of money should be. Not only did they want to stop the creation of sight deposits by the banks, they also wanted to abolish central banks, or at least their discretionary power of issuing and absorbing money on a basis of case-by-case decisions. As Simons put it, "rules, not authorities" should govern the quantity of money in circulation, and their simplistic rule was to increase the money supply by a rate within the range of 2 – 5 % per annum (Friedman 1969a). I disagree with such a context-blind and unpolitical attitude towards the institutions and practices of monetary policy.

Debt-free social credit (C. H. Douglas)

In contrast to the backward-looking plans of a 100% cash reserve on deposits, the approach of debt-free social credit by Major C. H. Douglas was more forward-looking, though not really far-sighted. I learned about Douglas' theories only through reactions to the first version of this paper. (Previous to this, the name had appeared only once in an aside from Keynes (1936, 28) describing Marx and Douglas as figures from the underworld of economics). In the period of rising communism and fascism between the First and Second World War, the social credit approach found some resonance. There was a related reform movement in the 1930s and a Social Credit Party that existed in Alberta, Canada, from 1935 – 1971 (but which abandoned Douglas' ideas in the late 30s).⁵

Mairet (1934) provides a sample of passages from the works of Douglas. The following is an account of the concept of social credit based on passages in Munson (1945, 166 – 180), Armstrong (1996, 112 – 116) and Hutchinson/Burkitt (1997). The latter two were obviously not the first to have observed that systematics and conceptual clarity were obviously not among Douglas' strengths.

Douglas shared and contributed to some of the typical ideas of anarchosyndicalism and guild socialism, e.g. prejudice against interest in general and, derived from this, questionable theses about supposed shortages of purchasing power, business cycle disturbances, or about technological unemployment, or cost-theory

⁵ Today, a journal "The Social Crediter" is edited by Alan Armstrong, Dunoon, Scotland.

of prices, and the presumption of being able on an aggregate level to planning production, prices, income, etc. He confused saving with hoarding, a mistake he shared with Gesell and others who wanted to overcome the metal-money age and yet kept caught in the thinking of that time. Nevertheless, despite questionable or invalid parts in his analyses, and despite socialist and syndicalist illusions and mischief, Douglas put forward some interesting ideas on the monetary system, e.g. that modern money as much as traditional money can be created in a debt-free way, and that the money does not need to be injected into the economy through investment and production, or through government expenditure, but can alternatively be injected through consumption as well.

One of the problems with Douglas is that his statements on debt-free social credit seem to have been manifold and diverse, perhaps even contradictory, e.g. with regard to the question of whether or not banks should be prevented from creating money. In principle, Douglas seems *not* to have conceived of a monetary system in which the creation of sight deposits by banks would be discontinued in favour of a national prerogative of money creation. Douglas wanted to stop governments taking commercial credit from banks and the public. The idea behind this was, that the democratic sovereign should not give up its inherited right to create money and take in the seignieirage from that to capitalistic banks. Instead, governments themselves should create an appropriate portion of the money they need in the form of social credit. "Social" – in tune with the jargon of the time – meant *socialized* money, including *governmentalized* money, and social credit was also called *national* credit, and could be called *consumer* credit as well.

Social credit, however, was not aimed at overcoming the reserve system. The continued issue of debt-money for investment and production would just be complemented by the creation of debt-free money for consumption, issued at the rate at which debt is created. According to Douglas this was necessary in order to compensate for a supposed deficiency in purchasing power which he thought to be inevitable, because a credit just creates the money for paying back the credit, whereas there is no money created by which the interest on the credit might be paid. As a consequence, either additional credit has to be taken up, thus triggering constraints of exponential growth, or there will be a redistribution of income from debtors to lenders. Issuing social credit would prevent that from happening.

Social or national credit would be administered by a body he called National Credit Office (NCO). The NCO would take the role of the central bank – being, however, a department of the treasury, not an independent institution. In line with the technocratic trust in scientific planning of his time, Douglas' NCO would determine the necessary annual quantity of new money according to an equally planned national production and prices. The NCO would continue to provide reserves for the banking system, and in addition it would issue debt-free social credit.

Douglas proposed two ways of issuing debt-free social credit: partly by subsidizing the prices of consumer goods, and partly by directly giving money to the consumer. In the first case Douglas wanted to exert price-control in order to

achieve what he considered to be the "just price" – a concept not as clear as it claims to be. The idea behind the "just price" seems to be that the inclusion of the cost of finance (interest, banking fees, etc.) in actual prices was deemed unjust. So this type of cost should be deducted from the actual price level of consumer goods. If the planned price deduction was 20 per cent, then the shop price of a good would be four instead of five Dollars. The shop keeper would be reimbursed for the missing one Dollar by his bank, and the bank in turn would be reimbursed by the NCO.

The remaining portion of the planned amount of social credit could be divided up among all citizens young and old, working and not working, thus constituting what Douglas called national dividend. Some portion of the national dividend could also be spent as government expenditure, e.g. on infrastructure and similar public works that became widespread during the 1930s, e.g. in the New Deal or similar schemes under fascist and communist rule. Further portions of the national dividend could have replaced unemployment benefits and family allowances. Douglas not only intended to substitute national credit to the government for taxes, but also national dividend to the people for wages. That, of course, was quite utopian. And yet, as Hixson put it, Douglas "evinced a far better grasp of the monetary problems of his time than did the contemporary proposals of Keynesians and Marxists", even if his analytical and conceptual contributions "were less satisfactorily thought through" (1991, 127).

General public prerogative of money creation (Pahlke, Gocht)

There are another two authors, contemporary rather than historical, who should be mentioned in this context. I came across their books when searching through the literature while working out the plain money proposal. One is Jürgen Pahlke (1970), a retired university professor of public finance, the other Rolf Gocht (1975), a central banker who was on the Bundesbank's board of directors from 1967 to 1975. Both of these authors envisaged a general public prerogative of money creation. The institution in charge would be a reformed central bank, which would become a true public authority with a discretionary power of exclusively creating and regulating the entire money base. Furthermore, they were in favour of issuing the money into circulation without interest and redemption. I share with both authors the conviction that continuing with the indebtedness of the money base has become proof of metal-age backwardness and a disfunctional monetary mistake, and that issuing future money in a debt-free way would be beneficial – to the income and capital base of firms and private households, to investment, the business cycle, employment, and the soundness of public finance.

Besides these common features, there are some differences, especially with regard to the question of how to stop banks from creating additional means of payment. Both Pahlke and Gocht, though being critical of the reserve system, did not fully escape the traditional gravity of monetary reserve practices revolving around metal money. They still lacked a fully modern concept of money, i.e. a purely value-informational and functional approach in monetary theory, a clear distinction between money and capital, and between non-cash money on transaction accounts

and stocks of capital on capital accounts. As a consequence, they had difficulties to see how the banks would lose their capability of "creating new credit" (sight deposits).

Pahlke's answer to the question was to abolish any central bank mechanism of refinancing banks, and to raise the required minimum reserve from then 10 – 15 per cent of bank deposits to 100 per cent, thus replicating the Chicago plan of 100% reserve money. Gocht's approach, in contrast, would not require a 100% reserve, but would – so to speak – keep the money 100% inside the central bank, without allowing banks to put their hands on. In his opinion, banks should discontinue cashless payment services because this might somehow be used to create new sight deposits (an unfounded suspicion as was shown above). According to Gocht, a technical subdivision of the central bank, a central checking office, should do all of the cashless payment transfers.

Another difference concerns the question of to whom newly created debt-free money should be given. Pahlke wanted to hand over the money to the government in exchange for tax-cuts to the same amount, whereas Gocht wanted to leave the money to the government as an *additional* public revenue. Decades ago, when Keynesianism was a dazzling star, this had perhaps not yet become a matter of controversy. Today, with most public budgets chronically oversized and unbalanced, and governmental debt having soared to dizzy heights, any proposal which would further increase government expenditure is out of place, and will probably stay so for a long period of time.

In the meantime, with the growing awareness of limits to public expenditure and indebtedness, there were other scholars and politicians too calling for a free government lunch, even if those calling promised not to exceed the frugal limits of merely the fresh cash available within the current reserve system (Filc 1989, Dohnanyi 1986). Even this relatively modest proposal got no response, perhaps because such proposals are habitually ignored, or be that because governments today are distrusted on principle.

Monetary safety, financial and economic stability, and public control

The arguments in favour of the aforementioned reform concepts mainly turned around distributive justice and economic stability. Ranking first with the 100%-supporters was the supposed injustice of having to pay the banks interest for loans, whereas the banks themselves do not have to borrow the newly created sight deposits against interest, instead of paying interest to the depositors. Justice and the morality of earning money, making profit, and making extra profit, are tricky ground. As to the idea of bringing about more justice by letting people earn more interest themselves, it has been explained above in how far this is founded on false assumptions. Moreover, an economy in which people are occupied with little more than taking subsidies, welfare allowances and interest from each other can hardly work.

Then there was the argument of safety of money deposits combined, third, with the stability of the business cycle including stable purchasing power through stable prices and a stable currency exchange value. The claim that Gesell's stamp scrips, Fisher's and the Chicago group's 100%-money, and Douglas' Social Credit were safe and stable gave the related political movement at the time its name of "stable money movement" (Fisher/Cohrssen 1934). At the time before and between World War I and II, the aspects of monetary safety and financial and economic stability may have been more appealing than they seem to be today. I certainly do not want to contradict fundamentally the safety and stability argument. However, the relativity of that truth should not be concealed. 100%-money and debt-free social credit would have been safe - and the same holds true for plain money too - in the sense that the money could no longer be diverted or disappear as a means of payment. Nevertheless, it was an illusion - as it would be with regard to plain money too - to pretend that 100%-money or debt-free social credit would automatically be stable money. Plain money will certainly contribute to further stabilizing monetary and financial institutions, and this will in turn have a stabilizing influence on the real economy. But with this orthodox monetarism is at its wit's end.

How far a currency and its domestic and foreign purchasing power prove to be stable depends on a number of factors. First, there is the quantity of the money base (at a given velocity of circulation) in relation to the quantity and price level of supplied goods and services; second, there are further economic factors such as the productivity and the strength or weakness of the export base of an economy, the soundness of public finance, the employment situation, income distribution, and others; third, there are a variety of political and societal factors such as stability of institutions, reliable political leadership, a sound legal system, effective and non-corrupt public administration, beneficial elite-cooperation, good education and training, stable change of demographic structures, etc.

Saying a currency is stable does not have meaning of itself. Safety or stability of the value of money does not result from the means of payment as such but is a question of securing the purchasing power of money. So the more substantial aspect of monetary safety is financial stability, and above all real-economic stability. With regard to the stability of domestic and foreign purchasing power, the quantity of money in circulation is just one important factor among others. The central banks, under conditions of the aforementioned approaches as well as under conditions of plain money, would have full control of the money base, actually for the first time. One may expect central banks with full control to do better than the many banks are now doing on their own. But there is no guarantee of this. Among the positions I share with Friedrich von Hayek is his critique of bureaucracies' presumption of knowledge. Why should central bank bureaucracies be automatically better money supply target-setters and target-hitters than market dynamics by themselves? Individual bank bureaucracies, however, big or small, do not know better either. The system's dynamics of the economy unavoidably lead to recurrent over- or undershooting to some extent. Steering does not usually work by rigidly aiming for the bullseye, but by correcting deviations from the course.

But there are differences of degree concerning possibilities and probabilities, and with regard to systemic conditions a plain money system, when compared with the present reserve system, entails more effective possibilities to control inflation, interest rates, or a currency's exchange value, as far as monetary factors are responsible for changes in these price levels. Moreover, a plain money system would be less prone to financial instability than is the case under the current opaque reserve system. Plain money could not automatically guarantee stable money, but it would no doubt enjoy advantageous conditions for making a sound contribution to stability of prices and purchasing power.

The yet more important reasons why I am in favour of full control of the circulating quantity of money by the central bank is the possibility of improving real-economic viability on a broad base, as will be explained in the chapter on visible and hidden money taxes, and the constitutional question of who should be given control of the nations' money base.

Creating the money base: Public prerogative versus private monopoly

As discussed above in the chapter on the legal and institutional side of converting reserve money into plain money, it is necessary from a currency theory point of view to be clear about the difference between the money base and the supply of money. For example, money can be supplied on the financial markets by anybody who has money available for that purpose. But not everybody is allowed to create money. In this sense anybody can be a creator of capital, but the creation of money cannot be possible for just anyone.

The money base consists of the cash and non-cash currency units in circulation. Today's M1 can serve as an approximate measure of the quantity of money in circulation. The money base is the monetary "material" by which the money supply is fed. The supply of money in the broadest sense would be identical with either side of the equation of exchange. In a less encompassing sense the money supply signifies *any transfer of income*, be that a voluntary donation, or a bureaucratically enforced levy, or a commercially free supply of money. Usually however, if "money supply" is not used in the confusing banking-theory vocabulary found in many textbooks, the term is identified with either a current amount of saved income or newly created money both of which are searched for on the financial markets to satisfy the current demand for money (borrowing) in any short and long term. Money supplied in this way constitutes capital. So it would be more appropriate to speak of "capital supply" rather than "money supply". *Money in supply* on the financial markets (with the exception of the foreign exchange markets) is a supply of money which, once demanded, constitutes capital.

Banking theory, which supports the present reserve system, is unable or unwilling to see the difference between the money base and the capital-constituting supply of money because for the most part it remains concealed whether a borrowing-lending-transaction creates money (sight deposits) or just transfers saved income. The only true "money market" today is the one between the central banks and the

banks, and aside from that the markets for foreign exchange. All of the rest are actually capital markets, in spite of the fact that banking language calls the segment of short-term capital a "money market".

Money is not income. If you are fortunate enough to enjoy an intake of money, the purchasing power of that intake is yours. The income is your property. But the carrier of the purchasing power, the money units in circulation, is not yours, because money itself is, or should be, a public domain. The legal proprietor responsible for the money is, or should be, the central bank. Income for the most part is a private or an individual one, and indeed should be that as much as possible. Yet the money base in circulation - on account and in pocket - is a public good. Among the authors cited above, only Irving Fisher was able to make an explicit statement on the monetary order and the money base of an economy as being questions of constitutional importance. The monetary order is part of the public order, and the admission of circulating currency, the creation and regulation of the money base, are tasks of political leadership that have to be carried out exclusively by a public authority, the central bank, as a body that operates functionally independently, but nevertheless, as do the courts, on the basis of democratically legitimized procedures.

States, modern states too, need functional as well as territorial integrity. Therefore they are based upon the public prerogatives of resorting to the use of force if necessary, of law-making, of jurisdiction, and taxation. To further unfold their ongoing modernisation, modern states need a comprehensive prerogative of money creation too. It will be a twin prerogative of currency definition and quantitative determination of the money base M . Economists of the Hayek type of school would accuse this prerogative of constituting a monetary monopoly. Yes, that it is. But speaking of a monopoly in this context is again a banking-theoretical confusion between setting the rules of a game, including the definition of tools, and actually playing the game. Money and the money base are different from the demand and supply of financial transfers of income. A central bank acting upon a general prerogative of money creation can respond perfectly to market signals without being part of commercial competition.

Within the framework of the existing reserve system the role of the central bank continues to be ambivalent, reflecting the neither-nor situation of having been a private business bank in the past, and the future role of becoming a unique public body creating and regulating M in a non-commercial non-profit-oriented way. Today, central banks create money freely and yet continue to behave as if money was a precious metal; they already do have a partial prerogative of money creation, but the really important part of that remains increasingly with the banks; they determine an incomplete and foreseeably soon irrelevant "money base" of central bank money, but not $M1$; and they continue to issue their central bank money in a pseudo-commercial way by granting loans.

Full control of the money base does not mean controlling the use of money. Plain money does not at all aim at nationalising the banking sector, or at restricting the freedom of giving and taking loans against interest, or at re-introducing a

somehow centrally planned inefficient economy, or anything whatsoever in that direction. The economy, including the banking sector, must as much as possible be a free, open and efficient market-economy. Business is welcome, banking business equally, but – simply in order to guarantee the freedom, openness and efficiency of the economy – the monetary order itself, the currency, and the amount of money in circulation must not be party to money-making. Again it was Irving Fisher who put it concisely: "Nationalisation of money, yes; of banking, no" (1935, 58). One can make such a statement only when one has come to see the difference between the circulating money base and the business turnovers carried out with that money, including capital-creating monetary transfers and the business volume of the banks.

About 300 years ago, especially after the Scotsman John Law was in 1716 granted permission to introduce national banknotes in France, the circulation of notes started slowly but surely to outweigh coins in all then developed countries. That is why in the following 200 years, until around the beginning of the 20th century, the medieval prerogative of coining was complemented sooner or later by national monopolies of issuing banknotes. I prefer "monopoly" in this context, because in the beginning it was the commercial business of privileged private oligopolies, which were led step by step towards the public prerogative of banknotes of central banks.

Today again, with sight deposits and cashless payment increasingly outweighing cash, a similar step needs to be taken by complementing the prerogatives of coins and notes by another one of non-cash money being used on money accounts, so that a full and plain general prerogative of money creation comes into existence. Control of this must be given to a democratically legitimized public body, a central bank. Central banks are well prepared for this step, since all of them have, during the last hundred years, become nation-state bodies cooperating internationally. This is a matter of legal fact and practice, even if their organisational statute might de jure still be a private one like e.g. in the United States where the Federal Reserve as an organisation is, curiously, still a private consortium.

The preference for a money base that consists of a single public currency is, in principle, not very controversial within monetary economics. It dates back at least to David Ricardo and then the currency school. The position was renewed in the theory of chartal money, i.e. fiat money or state controlled currency, by Georg Friedrich Knapp (1905), and later on it was approved again both by Keynes (1931) as well as by Friedman and other monetarists. Today, the step from the reserve system to plain money, including that of the central banks taking up a strong position of independence in monetary policy and having full control of the money base, is indeed simply the next obvious step in the evolution of the modern monetary system.

The opposition to a general public monetary prerogative with a clear-cut identity of the money base is not so much academic but comes from the banking business and related people representing obvious interests. Of course, some academics also take sides for a banking position. An outstanding scholar who did this recently

is Friedrich von Hayek, who, in a very late ideological upsurge of early 19th century radical liberalism, propagated the "denationalisation of money" (1977; also White 1989). The concept says, anyone should be permitted to issue his own means of payment in his own currency. Hayek called the currency he favoured the Ducat. Ducats were important gold coins from the 13th through to the 19th century from a variety of issuers widely used in the territories of the Holy Roman Empire. In order to keep the purchasing power of Hayek's Ducat stable, its value should be fixed against a commodity-index serving as a "material" substitute for gold. Other economists would prefer to fix their model currency against an index of industrial capital assets (as in Engels 1997) or against the value of landed property (as in Heinssohn/Steiger 1996). All of these authors, again, have not yet come to see, at least they have not yet accepted, the notion that money is of an informational nature and simply serves as a transaction aid and as a denominator of prices and the value of capital of any kind, and that money cannot again become a "material" economic value in itself. They continue to confuse a sack of metal or a patch of ground with the informational functions of money.

Furthermore, the renewed banking-theory approach is composed of a number of severe errors and shortcomings, as, especially in Hayek, it is driven by ideological zeal. The model starts from the unrealistic assumption that there would be a multitude of currency suppliers, hence a pluralism of circulating currencies under conditions of fair competition. Assuming this was true, it would be very impractical for everyday use to have to account and to pay in many currencies at the same time. Having an abundance of parochial currencies, to say it in economic language, implies tremendous transaction costs that are actually the main reason for having single currencies (Bofinger 1985).

In the metal-money ages there actually existed a single global currency, even more than Latin was in Europe the lingua franca of the educated. Any coins of pure gold and silver were welcome and used everywhere, because it was the gold and silver that counted, not the issuer of the coins. Today, however, modern informational money – non-precious coins, paper bills, non-cash book entries - counts for nothing of itself, and the credibility and market power of the money creators count for all. In the reality of Hayek's model-Ducat-world, one would end up with two or three very big suppliers, a situation of private oligopoly, with the oligopolists being global banks, private finance capital, beyond any public control and democratic legitimisation. Who really would expect them not to influence the price as well as the purchasing and exchange value of their currency according to their private interests? And why, after all, was Hayek so convinced that these banks, if they really wished to keep their money stable, would have the strength and means to be able to do so? Even today's big central banks cannot.

If public currency is unsafe or unstable, then private currency would be the more so. Private currency competition would induce tremendous currency speculation in the domestic arena too with practically everybody incessantly going into currencies expected to revalue, and going out of currencies under attack or subject to devaluation rumours. So private money would be volatile instead of being safe

and stable. And when a competitor failed, in a private currency system there was neither any lender of last resort nor any state guarantee of sight and savings deposits.

Curiously, the current situation in the global monetary system is not so far from what Hayek envisaged. There is a handful of competing big players talking tough about the purchasing and exchange value of their currency. The difference simply is that these players are big national central banks, the ECB being a transnational body (Vaubel 1978a+b, 1985). If competition among national central banks works, why should it be replaced; and if it does not, the situation was the same if not worse with the private oligopolists. When the banks in Hayek's model-Ducat-world try to keep their currency stable through open market interventions and similar methods, Hayek calls this a necessary and desirable "adjustment"; when national central banks try, he calls it "manipulation". He considers central banks as powerless subordinate cabinet servants of incompetent and ill-minded politicians pouring out ever huger amounts of money; and private banks as apt and able servants of public interest. How can a man, who has otherwise been so lucid, be so blind?

Matters of interest: Debt-free money base. Interest and redemption on the supply of money which constitutes capital

I am not going to say that central banks and politicians act according to the public interest. I am rather sceptical of people speaking loudly about the public interest. But it can be said that plain money would serve the public interest in the sense that it would entail advantages for almost everybody, except, perhaps, for the banking sector which would lose the extra profit resulting from the banks' creation of sight deposits.

The economic advantages of plain money, however, would only be realised by half if the way in which new money is phased into circulation continues to be credit creation. Saying this does not mean arguing against interest and redemption, but against *issuing the money base* in this way. Both interest and redemption constitute debt. In general, or to be more precise, in the case of transferred income, there is nothing wrong with that. Interest and redemption as such are useful and obviously necessary instruments of social obligation and control. Furthermore, interest – as a special kind of price on financial markets - is a functional necessity, an efficient tool for the self-regulation of financial markets. Given the utilitarian character of people and global culture things could hardly be different. But in the context of providing the money base as a public domain the debt-constituting credit creation turns out to be a completely unnecessary and dysfunctional burden on the national and transnational economy. It considerably diminishes the huge gains the economy in principle has yielded by giving up the extremely expensive - and, by the way, environmentally very damaging - gold standard in favour of immaterial cheap non-cash money.

The prevailing understanding of interest today follows the definition given by Keynes (1936, 140pp.). Interest is the price for borrowing purchasing power. The price was justified as being, so to speak, an illiquidity premium, i.e. a compensation for restraint from the liquidity preference everyone is supposed to have. Keynes may have been influenced by contemporaneous crisis events, when people and economists were still evoking the myth of golden treasures, and considered cash as a substitute for gold, meager but nevertheless better than unreliable deposits.

The illiquidity compensation idea is just a slight reformulation of the older thesis of deferred consumption. Since people making profit by lending money used to be rich, the thesis of deferred consumption was never truly convincing. Similarly, today's banks and institutional investors do not make a liquidity sacrifice, rather the normal state of affairs is that there is a great deal of money in search of profitable investment which fuels asset price inflation and leads to recurrent readjustment of book-values.

A flaw in any theory of interest within the frame of the traditional reserve system is the missing distinction between credit *ex nihilo* which creates money, and credit on the basis of transferred income which constitutes capital, be that money-capital flowing into portfolio investment or direct investment in industrial plants or real estate. When considering the creation of the money base, liquidity preference is an idea without substance. With regard to savings and the build-up of capital of any kind, however, the deferred-consumption-thesis and the liquidity-preference-thesis as a motivational explanation or moral justification of interest may not be completely fictional, particularly when seen from a private saver's or private investor's point of view. The argument would come closer to reality if liquidity preference was interpreted as risk aversion. The illiquidity premium, accordingly, can be understood as a risk premium reflecting the probability of the money not being paid back. That is the way bankers tend to justify interest or at least an important part of it.

In order to avoid metal-age retrovision the distinction between the money base, the capital-constituting supply of money, and the ambivalent status of sight deposits needs again to be made explicit:

(1) The *money base* is created *ex nihilo* by the central bank at no risk. As lender of last resort, or creator of first instance, central banks detached from gold reserves can no longer go bankrupt (although they may lose credibility).

(2) The *capital-constituting supply of money* or *capital supply* is built up from transferred income (savings) lent by the owners at a risk.

(3) The sight deposits within the framework of the traditional reserve system are a kind of monetary joker simultaneously part of the money base *and* the capital supply. The sight deposits too are created *ex nihilo* by the banks through credit creation, but the banks do this at a risk indeed. The risk is bigger for smaller banks, and smaller for the bigger ones. In an emergency the big credit institutions can hope for generous central bank support for political reasons.

The risk argument has become irrelevant to the money base created by the central bank, whereas it continues to be highly relevant with regard to the capital supply from transferred income. As a consequence, interest as a risk premium no longer applies to the money base, whereas it continues to be rational with regard to the capital supply. As long as there is creation of sight deposits by the banks, the risk argument continues to be acceptable to a certain extent. Once sight deposits are abolished in favour of plain non-cash money created exclusively by the central bank, the difference between the money base and the capital-constituting money supply will be absolutely clear and unambiguous, and it can now be seen why the difference is of utmost importance: The money-base can and should be issued as debt-free money, whereas the capital supply cannot be debt-free unless the suppliers decide not to save the saved income and instead to leave it as a donation.

Besides, there remains a traditional element of interest still not being expressed by the terms "price of purchasing power" and "risk premium". For seeing this element let us replace the term "price" or "premium" with another term that could be called "tributive transfer". Interest can be seen as tributive transfer. Because of this element of usury which seems to have been present throughout history, anarcho-syndicalism in its extremist ideological attitude a hundred years ago interpreted interest in general, as well as ground rent, simplistically as a private tax. Contrarily, in the understanding of utilitarian economics, pricing *is* meant to take full advantage, or to accept the full disadvantages, of existing conditions of market scarcity and the power of market participants to impose the price they wish to realise. Whether a price is justified and fair, or an unfair tributive transfer equivalent to a private tax, has no part in an economic statement, but certainly can be part of moral and political judgement.

To conclude, interest incorporates a number of components:

- (1) the price of the financial service of broking and managing a loan (certain parts of this transactional service are already charged separately)
- (2) the risk premium
- (3) the inflation rate making the difference between nominal and real interest,
- (4) the scarcity surcharge and/or positional power surcharge (taking full advantage of given conditions), eventually becoming extortionate rates of interest in cases of usury.

Interest has so far succeeded in passing as a flat rate disguising the fourth component by ingenuously overplaying the significance of the first and second.

Money taxes in disguise

Furthermore, interest exists in the form of a *credit* flat rate and a *debit* flat rate, analogous to asking and buying prices, or offer and bid prices, e.g. for foreign exchange or on the stock exchange. I want to draw your attention now to the fact that in the first instance, at the source of the money in circulation, there is no debit-interest, because modern money is created *ex nihilo*, by the central bank which creates the cash and the non-cash reserves, and by the banking sector which creates

the sight deposits. The central bank gains its particular central-bank-profit and the banks gain their margin extra profit from creating the money base by taking credit-interest and not having to pay debit-interest themselves.

Since the creation of money is free and the money base is a public good, the interest taken in by the central bank and the margin extra profit of the banks actually *are* tantamount to money taxes. Like any tax, a central bank's interest intake (less operational expenditure) has to be delivered to the public treasury. In feudal times the gain from issuing new metal money (resulting as the difference between the cost of producing the coins and their purchasing power) was called seigniorage. Monetary theory continues to apply this word to the gains from issuing modern paper money and non-cash money. Seigniorage in the original sense has nowadays reduced itself to the not so important government privilege of issuing non-precious coins and having credited in exchange precious, though limited amounts of money. In the case of the sight-deposit-creating banks the seigniorage has become the *private* privilege of taking credit-interest without having to pay debit-interest, thus creaming off the margin extra profit as already explained above.

If the central-bank-profit from taking interest without any procurement cost (though at transaction cost) can be seen as a money tax, then the commercial banks' margin extra profit is also a money tax, but in this case a *private* tax which is part of the banking sector's operational profit. Private taxation is a feature totally at odds with the public consensus we live in. While a central bank's cash tax is unnecessary and dysfunctional, its yield, at least, flows to the treasury for public purposes. The bank's private tax on sight deposits, however, flows to the shareholders and the employees of the banking business. Both the public and the private money tax are legal, though not necessarily legitimate. If the public cash tax taken in by central banks is questionable, the private tax on sight deposits taken in by the banking business is a political scandal.

The amount of the money tax disguised as interest is important. Take the yearly net profit of the central bank and you get an estimate of the central bank's cash tax. Since sight deposits are about four to five times the size of cash, the bank's private sight deposit tax should approximately be more than four to five times the central bank's annual net profit. In Germany - where the figures were easily available and in the absence of similar figures from the ECB at present - the annual profit of the Bundesbank in recent years was about 12 billions of Euros. So the private bank's extra profit must have been around 55 billions of Euros, and the private and public money tax in total around 65 billions of Euros. How much money! Enough to compare e.g. with the country's value added tax at 90, and the income tax at 130 billions of Euros. Is it not amazing for such an important tax to go almost unnoticed?

How plain money should best be put into circulation

Plain money and the ways it can be issued are two different things. Plain money, being the total quantity of the money base created freely ex nihilo by the central bank as the single source of money on the legal basis of a general public prerogative of money creation, is a valid concept in itself and separate from questions concerning the institutional channels and procedures by which money should best be phased into circulation, particularly the question of whether it should be done by granting loans or in a debt-free way. Let us consider now the ways in which the step from reserve money to plain money would be beneficial, and the ways it would not.

Since plain money as such does not necessarily imply its debt-free issue, a minimal reform programme could be to establish the central banks' general prerogative of money creation while continuing the issue of the money by granting loans to the banks. Money would definitely become safe, but there are already some government guarantees for deposits today, and the money's purchasing power and the business cycles would not necessarily be more stable, as discussed above. Still more important, the total of today's disguised money taxes would continue to weigh heavily upon the real economy. The private margin extra profit would reappear as a public revenue to the treasury. The finance ministries would take in the extra profit which the banks would lose, thus further expanding government expenditure. To the public such a minimal reform would not make any difference at all, except for a further increased dependency on government interventions and public funds, and the further entrenchment of sub-potential levels of investment, employment and income resulting from such a scenario.

As much as the creation of plain money by granting loans would make a desirable *constitutional* difference, it would not make any desirable *economic* difference. The possible economic benefits of plain money stem uniquely from the non-indebtedness of the money base. Debt from loans has two aspects: interest and redemption. Accordingly, the economic benefit of debt-free plain money has or can have two different sources: (a) the interest on the money base which no longer needs to be paid, and (b) the amount of the money base, i.e. the current annual increase of the money base, which no longer needs to be paid back in the future.

That is why a programme of monetary reform *must* indeed include abolishing the creation of money by commercially granting loans in favour of a non-commercialized debt-free money base. Plain money is a precondition for this, because only plain money can be debt-free money, and because only a public central bank can do what commercial banks neither could nor would do, and that is to put the money into circulation in a non debt-constituting way by giving the money to the public in accordance with rules that will have to be specified.

By far the most important *economic* advantage of plain money is the possibility of putting an end to the indebtedness of the money base. Whereas the traditional reserve system imposes this heavy burden upon the real economy, plain money opens up the possibility of a debt-free money base, thus relieving the real economy

(a) from paying interest on the loans by which the money base is created and (b) from having to pay back the money in the future. According to the aforementioned example figures from Germany (a) amounts to 65 billions of Euros annually, (b) to 25 – 32 billions of Euros at a five-year-average, measured approximately by the annual increase of M1. It can be concluded from these figures that doing away with the creation of the money base by granting interest-bearing loans, i.e. doing away with the money taxes in disguise, is twice as important as the question of what to do with the newly created debt-free money.

When it comes to the latter question, there are the choices already considered in previous monetary reform concepts: leave the money to the government, or pass it on to the people, or either in combination. Friedman liked to begin his reflections on the money supply with the image of a helicopter dropping bills from the sky. A similar approach, though less spectacular and more effective, was chosen in 1733 in the U.S. state of Maryland with new legal-tender paper issues. Every taxable individual was given government bills worth 30 shillings – a practice fulfilling the criteria of debt-free plain money and of administrative simplicity, equality before the law, and distributive justice. The practice was forbidden in 1751 because of interventions of the banking business (Hixson 1993, 56). Douglas, similar to the Maryland practice, planned an exactly calculated dividend payed out to everybody. Gesell, as later on Pahlke too, wanted to pay out such a dividend by leaving his stamped money to the government *and* allowing at the same time and to the same amount reductions in the income taxes of firms and private households. Douglas furthermore wanted to let the government spend only a certain proportion of the newly created money, whereas Gocht wanted to leave all of this money to the government.

This sort of question constitutes an additional problem different from the one discussed above. The first question was whether money should be issued by granting loans or as debt-free money; the second question now is whether debt-free money should be left with the government or be given to the people. At one end of the spectrum of possibilities of how to issue debt-free plain money, is the option of passing all of the money to the people by some sort of tax cuts, tax credit or dividend. At the opposite end of the spectrum all of the money could be given to the finance minister as an additional resource for increased government expenditure. Of course, almost any combination in-between is conceivable. It is the new-old conflict between state and civil society, between government and citizens, a conflict which traditional conservatives, socialists, and today's industrial and welfare conservatives, including the unions, prefer to remain unaware of, whereas it has always been evident to people such as liberals, libertarians, anarchists, and communitarians. Now it again marks a new-old political frontline, that between traditionalists and modernizers.

Democratic governments are supposed to serve the public interest and even general welfare. These are almost mythical concepts of political philosophy extremely hard to operationalize empirically. After more than a hundred years of economic interventionism and public welfare, however, it has become obvious that

too much government is certainly *not* in the public interest and undermines general welfare. Under present-day conditions government expenditure and the states' high indebtedness need to be brought down, as will be discussed in the next chapter. That is why debt-free plain money should contribute to overcoming state-centredness in favour of a better vested civil society.

The above figures on taxes in disguise make plain that the benefits of an interest-free and non-redeemable money base can be brought about more completely if the step to plain money were used for a *distributive reversion*, i.e. to bring down taxes, public redistribution and dependency on government expenditure, and fostering civil self-sufficiency in the real economy. Even if plain money were issued free of debt, its possible economic advantages could not fully be brought about if the annual increase in the money base were to become just another and additional source of government expenditure. Both the amount of the money base as well as the saved interest thereon should add to the income and capital base of market enterprises and the people, not to the government revenue. Instead of having to pay overly high taxes and welfare contributions firms and individuals should keep their means. The resulting higher net incomes would stimulate a decentralized market-pull immediately appropriate to the needs of the customers, and also would help to build up savings and capital, thus stimulating investment and employment by supply-side market push.

So, before issuing plain money in a debt-free way one must have made sure that government expenditure, income taxes, and VAT on services⁶ are lowered to the degree plain money is being issued. The goal is to bring about distributive reversion by politically negotiating a package deal of issuing debt-free money for well defined purposes *and* decreasing government expenditure and the tax burden to the same extent. Distributive reversion includes a re-contribution of money from government to the people and firms, and a re-attribution of the functions and tasks of (1) citizens, (2) firms, and (3) government and public administration within the framework of a less state-centred and more civil society. Today, many a business has become chronically dependent on subsidies from the interventionist state, and many people are dependent on the allowances of the welfare state, because the state actually takes away the money from businesses and private households. If the money were left with the people – within the present framework of high levels of aggregate productivity and income – people would be much better prepared to provide for themselves.

⁶ VAT on services has the same effect as a tax on labour: it puts strain on employment and self-employment. VAT on material goods, by contrast, has the same effect as an expenditure tax on materials, i.e. an ecologically oriented consumption tax, which is a necessary component of any modern tax system.

Crisis of the welfare economy. The tax-income-spiral

When the Soviet Empire imploded and the iron curtain was pulled down, most commentators rightly saw the West as the winner of the cold war, but they mistook this for proof of the western system being the model of the future. Actually it is an obsolete model too. Both East and West were traditional industrial societies, organized within traditional nation-states, both had the same notion of national welfare, and both claimed to be more productive and better prepared for providing for their people. The means were different, but with regard to wages and welfare to a much lesser degree than political propaganda made it appear.

In the East were the states of the so-called real socialism, in the West social states called welfare states. In the East welfare was the object of a totalitarian societal policy, in the West it was, and it still is, the object of an ever more colonising social policy. In the East there was centrally planned investment and distribution, and in the West there was also, and still is, an ever bigger distributive state economy. At the beginning of the 20th century, which, according to Ralf Dahrendorf (1983), was the social or socialist century that followed the liberalist 19th century, government expenditure was near or under 10 per cent of any national income. It has kept growing since then, e.g. up to 30 - 35% in Switzerland or the United States, 45% in the United Kingdom, 50% and over in France or Germany, 70% in Sweden, and 80 - 95% in the socialist states of the former eastern block. Now both the former East *and* the West have entered into a structural crisis of transformation, marking the end of traditional industrialism and the transition to another state of modern society. Government expenditure will certainly not come down to under 10 per cent again. It may be that in modern societies government expenditure of perhaps 20 - 25 per cent is necessary in order to ensure highly developed administration and infrastructure. Yet even this actually means cutting today's levels by half.

Western welfare policy was built on the Robin-Hood-myth of taking from the rich and giving to the poor. The myth has turned out to be an existential illusion. The government should stop being the big bureaucratic highwayman and big spending benefactor. The beleaguered have come to hate applying for some of the money taken away from them to be graciously given back. Instead of solving social and economic problems, the welfare state, in its attempts to ease social pains, has become their primary cause. The so-called secondary distribution (the public redistribution of income) is not really secondary and re-distributive any more. As a matter of fact, the claims of the revenue office, social insurance, and similar bureaucracies, are public finance transfers which constitute - alongside the interest claims of credit transfers - distributional constraints which are themselves the primary and prior steps in the process of income distribution. This is because they are *anticipated and given priority before* wages are settled, before re/investment decisions are taken, and before private profit from own business can be taken. If seen without prejudice and wishful thinking, socialism and welfare for the most part have not delivered on their promises, and they have created injustice and inequalities of their own.

In the 70s and 80s, the American economist Martin Feldstein was accused of being antisocial, because he wrote about high welfare and unemployment payments discouraging hard working, and about high levels of taxes and welfare contributions discouraging saving and investment (Feldstein 1974 – 1987). He could perhaps have been criticized for making a problem of secondary order such as willful unemployment a central affair. Basically, the Feldstein complex is right, although the feed-backs implied can be more differentiated.

The problem complex of excessive government expenditure can be outlined as follows: higher level of government expenditure → higher taxes and levies, higher governmental debt → higher cost of employment, lowered rate of new employment offered, increased subsidy and welfare transfers, savings and capital build-up below potential; higher income from interest for the banking sector and the well-to-do → private investment below potential, subsequently with increasing governmental debt, public investment below potential too → economic growth below potential → employment below potential → compensatorily increased subsidies and welfare payments → increased government expenditure. And so the vicious circle continues to spiral on...

During the inflationary 60s and 70s the wage-price-spiral was an important issue. Meanwhile, with the current low level of inflation, the interventionist and welfare state has been driving three more important and more comprehensively deteriorating spirals. First, the tax-income-spiral. While the burden of tax and welfare levies is being increased – be it done by actually increasing levy rates, or by expanding the taxable population, or by abrogating tax deductions - the income of those who are economically in a rather weak or unorganized bargaining position is being lowered, whereas the income of those who are in a stronger or well-organized bargaining position is being maintained or increased in order to compensate for the increased losses from paying taxes and levies. So the weak tend to lose real income; those in-between tend to maintain or even slightly increase real income, and the strong may considerably increase their income, while using the high tax burden as an excuse for forcing through their pay increases.

In the labor market, the tax-income-spiral has the effect of being, second, a spiral of higher taxes/contributions and less employment, in the sense that employment is forced down below potential. Income and wage taxes, social insurance contributions, etc. are certainly just one factor among others determining the levels of employment and unemployment. But being one important contribution in determining these levels, there is no doubt that the higher the taxes and contributions the more the level of employment is brought down below its potential. At the commodity markets, with regard to both consumer and industrial goods and services, the tax-income-spiral has the effect of being, third, a spiral of lower savings rates as well as higher endebtmnt rates, both private and public, on the one side and less investment on the other, again in the sense that investment is brought down below potential. The tax-income-spiral resulting in a second spiral of higher taxes and underpotential employment, and a third spiral of less savings, more endebtmnt, and underpotential investment must be overcome. That is why a process of

distributive reversion has to be put on its path, with government expenditure being brought down while keeping a certain level of necessary welfare payments, to avoid aggravating further the polarization of income distribution.

Funding a basic income scheme with the annual increase of M

A suitable measure for opening a road to distributive reversion is the funding of a basic income scheme by means of the annual increase of the money base M, on the basis of a well defined procedure independent of government, and reducing taxes accordingly – so that in the end the full benefit is felt by the people and enterprises big and small. There are a number of basic income schemes to be found in the literature that have been worked out in detail and proposed in political programmes (among many others Rhys-Williams 1953, Friedman 1962, Friedman&Friedman 1980, Tobin et al. 1967, Greffe 1978, Engels et al. 1973, Mitschke 1985, Kronberger Kreis 1986, Robertson 1985, 1990, van der Veen/van Parijs 1986, Klanberg/Prinz 1988, BIEN 1996).

A suitable basic income scheme needs to be in accordance not only with financial feasibility in general but here also with the necessities of plain money in particular. A basic income scheme fulfilling these conditions can by no means be the cornucopia some of the advocates of basic income have been dreaming of. In reality, the level of basic income would not be far from the means-tested welfare allowances of today that would be replaced, especially social assistance, unemployment aid (the income security net *after* unemployment insurance) and training allowances. Such an income scheme would not encompass and not replace child benefit and other types of family allowances, because, and insofar as, these are not poverty-means-tested. Equally, a suitable basic income scheme would not replace social insurance systems, especially not those for unemployment and retirement pensions. But these systems probably would have to be redimensioned, because an important feature of a basic income scheme can and should be the topping up of low wages, low pensions and low unemployment benefits, and other types of low income. (Further details in Huber 1998).

The central anchor of any basic income scheme needs to be an unambiguously objectivized income measure, very probably the general income equivalent, i.e. the average household income per capita weighted according to the number of persons belonging to a household (adult, children, young, handicapped, and similar). The general income equivalent has become a benchmark referred to by the research community and the political community dealing with welfare and poverty issues. Half of the average per-capita-income (50% of the general income equivalent) is considered to be the threshold below which there is unacceptable deprivation (Townsend 1993, Hauser/Hübinger 1993). An income of between 50 – 75% of the general income equivalent can be considered to constitute a precarious living standard (Hübinger 1996). The general income equivalent today is at roughly 1.000 Euros. So a precarious living standard is at about 750 and below, and unacceptable deprivation starts at under 500 Euros.

Persons with no income and savings at all would get the full standard value of the basic income, that is 500 Euros. Persons with some or more income up to the limit of the precarious living standard would in addition get a decreasing proportion of the basic income standard value according to the following rule:

$$\text{DispIn} = \text{OwnIn} + (\text{BasIn} - \alpha \times \text{OwnIn}) = \text{BasIn} + \text{OwnIn} (1 - \alpha)$$

- DispIn = Disposable income
OwnIn = Own Income, e.g. earned income, rents, savings interest, dividends, pensions, welfare benefits other than basic income, scholarships, child maintenance, etc.
BasIn = Basic Income Standard Value
 α = A deduction rate determining the amount of basic income allowance left. α should start at 0.66 and end at 0.5 in order to encourage own income.

With regard to topping up low income of any kind, a basic income scheme would be similar to the U.S. EITC-scheme, but more comprehensively so and without the phase-out lock-in of the EITC-scheme due to inappropriate conditioning (Bird 1996, Browning 1995, Kosters 1993, Scholz 1994, 1996, Holtzblatt et al. 1994).

A basic income scheme along these lines entails a number of advantages three of which are of special importance. First, there is an income sluice from poverty to precarious and normal income, or, in other words, from no income or unemployment to employment and own income, thus avoiding the poverty trap and unemployment trap known from traditional means-tested programmes. Second, in Europe such a scheme could be introduced on the EC-level, bypassing the apparently insoluble problem of so-called harmonization of a patchwork of European national welfare legislation. The scheme certainly would be a boost to European economy and welfare, because, third and most important, the scheme could be completely or partially funded by the European Central Bank, thus helping to bring the advantages of plain money to the economy and to the citizens in general.

How and why the funding of a basic income scheme by the central bank can be achieved

How and why could the funding of a basic income scheme by the central bank be achieved? Let me first explain how. The central bank would *not* deliver this money to the treasury, and probably not all of the fresh money would be used for basic income purposes. The public authorities entrusted with the administration of basic income – the revenue office and/or the welfare offices – would get drawing rights, not money. The procedure would certainly not be arbitrary. E.g. the central bank should not be permitted to refuse to issue basic income drawing rights as long as these keep within certain limits laid down in legal documents. The amount being issued would certainly need to be kept at a rather steady level. The central bank, however, must be given the decisive right to determine how much is enough and to say "no" to whom ever it might decide to.

With regard to the question of discretionary versus rule-bound monetary policy, the process of issuing non debt-constituting plain money for funding basic income certainly is more a rule-bound rather than a discretionary way of issuing money. As a matter of fact, the reality of central bank practice is: a combination of discretionary and rule-bound measures anyway. This is because central banks cannot avoid issuing a certain relatively stable basic amount of fresh money year after year. Under conditions of plain money, this basic amount would almost certainly be 5, 6, or 7 times the operational mass of the means the central bank disposes of today (today's official M1 plus the hidden parts of M1 plus additional sums from minimum term setting explained hereafter). So it can be assumed that the central bank, with regard to the long-term perspective of money creation, would be able to fund a basic income scheme, or to make a major contribution to its funding, in a rule-bound way, as it would continue, for regulative purposes in the short and medium term, to absorb and re-issue certain quantities of money on a credit basis in a purely discretionary way.

The drawing rights given to the revenue office or welfare authority are solely for clearance and accounting, not for payment. They are transmitted by the authorities by distributing them to the persons entitled to a basic income allowance. The drawing rights neither constitute money at the disposal of government nor government debt. There is no deficit spending. Only the final receivers get money. The money is paid out by the banks on receipt of the drawing rights, and the banks are reimbursed by the central bank in the same way. The drawing rights are not transferable to anybody else, and not discountable by the banks. The benefit receivers and the banks balance the asset of drawing rights as a type of security against the asset of plain money. The central bank, instead, will do what no one else is able or allowed to: balance the "asset" of drawing rights it has issued against the "liability" of plain money it has issued.

The money would immediately be spent by the receivers, thus entering into general circulation, becoming income of firms, businessmen and employees, being spent again, or e.g. being deposited into banks (i.e. borrowed to banks), thus contributing to the stocks for lending or portfolio investment. It makes no functional difference to the economy if money is phased-in through credit and investment or through welfare gift and consumption. As a rule, throughout history money has been phased-in through royal or state consumption, up to the military-industrial consumption and welfare consumption of today's big superpowers. The important thing is just to make sure that there *is* turnover and income high enough for building up stocks of investment capital.

To the degree that the central bank would be issuing plain money to fund basic income, the government would be able to – and better should be required by law - to reduce its expenditure and levels of taxation and welfare contributions. The true general benefit which plain money can bring about is to kickstart a process of distributive reversion. Overcoming the excessive state-centredness of the interventionist and welfare state certainly cannot be achieved just by funding a basic income scheme through the annual increase in the money base, and reducing public budg-

ets and taxes accordingly. But doing this could certainly give an important backing to a breakthrough in distributive reversion. Consider the tax burden taken off the economy as the sum of all of today's money taxes plus today's taxes and contributions for funding the basic welfare benefits (which on the basis of the example figures given here adds up to the impressive figure of 90 – 95 billions of Euros in Germany alone).

Labour markets would be relieved. Employees and self-employed would have more job opportunities, because employers and markets would better be able to bear what they cannot any more today as a result of the high burdens of taxes and interest payments. In consequence, more income and savings would remain with the businesses and private households, adding to their capital base and their ability to invest and to look after themselves. Dependency upon the state and the banks would decrease. The general level of interest rates would be lowered, without squeezing the margin between debit- and credit-interest. So banks would probably increase commercial turnover rather than lose business, because well-off firms and citizens would have extended investment and borrowing needs as well as the means and the creditworthiness to satisfy these needs.

Let me turn now to the question of why a plain-money-funded basic income scheme is feasible from a monetary point of view. As a result of the step from reserve money to plain money, the fresh money making up for the total increase of M would have to be created by the central bank. The annual increase in M represents quite an important sum. As an illustration let me refer again to the situation in Germany in the absence of ECB figures. During the 90s central bank money grew annually by between 4 to 6 billions of Euros. In comparison, the total money base as officially measured in M1 grew at a five-year-average of about 25 – 32 billions of Euros. Since M2 and M3 are misleading to a certain extent, the real growth of the money supply of M1 is higher. Another 5 billions for both are certainly not too far-fetched an additional amount, so that the average annual growth of M was about 30 – 37 billions of Euros.

During the same time, means-tested welfare assistance cost about 27 billions of Euros annually, an exceptionally high level, as unprecedented as it will be unacceptable in the long run. Unemployment aid was about 8 billions annually, and training allowances at no more than 1 - 2 billions. The total of these welfare allowances is about 36 billions of Euros. As can be seen from these figures, the normal annual growth of M and the abnormally high annual cost of today's basic welfare programmes are coming close to each other. The excessively high level of current welfare payments, caused by current structural mismatches in the labor market, the school and university system, and pension schemes will have to be overcome (not least with the help of a plain money system). In this case the cost of these basic welfare payments would undoubtedly come within the range of the annual increase in M.

Even if this was not completely the case, the total cost of a basic income scheme could be split between the government and the central bank. The important thing is to substitute fresh plain money for tax-levied money. This would not

merge taxation with the creation of money, thus improperly mingling the functions of government and central bank. It depends on clear regulation, particularly to prohibit the government from demanding money from the central bank, and on the fact that money issued by the central bank in a non debt-constituting way would neither be money at the government's disposal nor constitute a government debt.

The proposals of plain money and basic income drawing rights are, again, two different things and do not necessarily need to be combined. I am emphatically in favour of combining the two, because to me the plain money proposal is actually a means of rendering possible the debt-free funding of a basic income, which in turn would open a door to allow distributive reversion to become less state-centered and less dependent on government and banks. Other people, of course, may have different political priorities, and it could easily be the case that to some people the plain money proposal might still be of importance even if they have no interest at all in basic income nor in bringing down government expenditure.

Substituting minimum term setting for minimum reserves

In addition to the general prerogative of money creation, the central bank can be given a further monetary instrument to serve as a substitute for the obsolete minimum reserve policy, and allowing to a degree for the expansion of the money base in a non inflation-accelerating way. The basic mechanism is as follows.

$$M \times (\{ V_{\text{financial}} \} V_{\text{real}}) = (\{ T_{\text{financial}} \cdot \emptyset \text{Transfer-Sums} \} T \cdot \emptyset P)$$

The meaning of the variables in the equation is the same as above, but a difference is made between the so-called real economy and the financial economy. "Real economy" refers to any transactions of goods and services or labor, also including transactions of capital goods such as industrial machinery and real estate. In contrast, the financial economy consists of (a) monetary transfers through granting loans and portfolio investment, (b) public transfers through taxes, welfare contributions and other enforced payments, and (c) private money gifts and donations. The financial economy and the real economy constitute two different spheres of the circulation of money related to each other by decisions and processes concerning the repartition of resources and money itself. By continually interacting side by side, the financial circulation of money comes before and after real-economic circulation, while the real-economic transactions through selling and purchasing imply financial transfers before and thereafter.

What has already been said with regard to the relation between the quantity of money M and its velocity of circulation V , can now be said again in an analogous way with regard to both the financial-economic velocity $V_{\text{financial}}$ and the real-economic velocity V_{real} . If V_{real} is kept constant and $V_{\text{financial}}$ speeded-up, then a smaller money base is needed to carry out the real-economic transactions. That would fit as part of a description of what is going on today. If, on the contrary, $V_{\text{financial}}$ is kept constant and V_{real} is increased, then an expanded money base is needed. As a consequence, if the real economy grows and develops, the money

base M could be increased while keeping $V_{\text{financial}}$ constant. Alternatively $V_{\text{financial}}$ could be increased while keeping M constant. In reality, any combination of these two basic possibilities may be the case.

The new monetary policy instrument proposed here gives the central bank the right to intentionally influence $V_{\text{financial}}$ by setting a minimum term for short-term borrowing and lending. The new instrument of minimum term setting would be a more than adequate substitute for the minimum reserve policy that has already become somewhat obsolete today and will no longer be available under conditions of plain money (reserves won't exist any more).

A policy of minimum term setting is already being practiced too, in fact by the banks to the public. As a common practice, the banks request a minimum term of four weeks for fixed-term deposits (even if there are ever more special arrangements breaking this practice, thus accelerating the circulation of money and further minimising the banking sector's dependency on central banks). In contrast, on the inter-bank money market very short-term borrowing is business-as-usual. There are weekly rates, 2-day-rates, overnight rates, and – who knows – perhaps hourly rates will become common in the future. Seen from a banking-theory point of view this can indeed be considered as a money market, because the result of accelerating the monetary circulation in this way is the same as if the amount of money was expanded by the banks. Seen from a currency-theory point of view the practice and its perception are no good, because they undermine any control of the money supply, and besides, because it is not really a money market but a capital market, even if the investments being made are extremely short-term.

In applying the new policy instrument of minimum term setting, the central bank could request a minimum term of, say, 20, 40 or 60 or more days in public circulation, and 5, 12 or 20 days in inter-bank circulation. As a result, the financial circulation of money would be slowed down a bit, and banks and the public would need a slightly expanded money base to maintain their transactions. This does no harm at all. There would be neither any money shortage nor any capital shortage. Real-economic transactions as well as monetary transfers longer than very short-term would continue as if nothing had changed. And, finally and for exactly the same reason, there would not be any inflationary impacts. Neither more nor less money would be spent than would have been spent otherwise. The difference simply is, there would be more non-cash money which is just not being used at the moment, exactly in the same way as you may have cash on you that you may not use for several days or even weeks.

Unfounded concerns about inflation. Questions of money reflux and future growth

At the end of this presentation of the plain money proposal a question you must certainly have been wondering about remains: concern about inflation. Most people who are told for the first time that money is created freely ex nihilo, and that legal tender can also be phased into circulation in a non interest-bearing and non

redeemable way by funding a basic income scheme, or through government budgets, or tax reductions, or a national dividend, make an instant, almost instinctive association with "printing money", in effect expressing fears of inflation.

With regard to plain money as outlined here, fears of inflation are entirely unfounded. The plain money proposal is *not* about issuing *more* money, it is about changing the institutional procedures according to which a necessitated quantity of money is created. What would basically be different from today is the source, not the quantity of the money base. Bank-created sight deposits would be replaced by central-bank-created non-cash money. Insofar, the quantity of money remains the same, and that quantity would still have to be kept within the limits of a monetary policy oriented to the potential of economic growth. In other words, the money base should not be allowed to exceed the potential volume of real-economic market transactions inherent in current real-economic and financial developments.

Of course, under *any* conditions – be that a regime of gold standard of the metal-money ages or a modern non-cash functional money system, be it dependent or independent of government, be it dominated by the banks or controlled by the central bank – there will never be a truly safe guarantee that people in charge will not break the rules and not abuse the authority and power given to them. But as long as the decision-makers responsible for monetary policy respect the rules of the regime, there will be no inflation for monetary reasons. This holds true within the existing reserve system as it will continue to be true under conditions of plain money.

Inflation, by the way, as discussed above in the context of questions of safety and stability, is not just about money supply. Seeing the problem this way is a monetarist obsession which, if not a true fallacy, is at least a short-circuit. Quantitative monetary theory is certainly right. The plain money proposal fulfills all of these criteria. Nevertheless quantitative monetary theory is incapable of giving a comprehensive model of the dynamics of inflation, disinflation and deflation, which is nothing but modelling the dynamics of prices on financial, labour and commodity markets. Any well-elaborated theory of inflation or prices has to go deeply into the empirical, historically examinable economics of *structural change* and transitional or longer lasting mismatches of real-economic as well as monetary factors (Paarlberg 1993, Horsmann 1988).

There remains one characteristic – not of plain money as such, but of the debt-free issue of plain money – that could be regarded as the snag in the proposal; nevertheless this is not the case. If money were issued in one of the debt-free ways discussed, then there would be no money reflux in the sense of the related banking-theory thesis dating back to Fullarton. Once the money has entered into circulation, it continues to circulate, theoretically forever, without flowing back again to its source for final absorption or extinction. In principle, there is nothing new or special about this. Throughout known history all or most money has been issued in this way, whereas the predominance or even exclusiveness of money-issuing by granting loans is only a relatively recent development. Furthermore, I have already mentioned why the credit-related reflux principle represents more a theoretical

rather than an empirical thesis. And yet, it is not particularly satisfying to hint at your adversaries' problems when they claim that you have a similar problem yourself.

The underlying economic problem is growth. Social evolution since the neolithic revolution, particularly since the beginning of modern times, can be regarded as a very long lasting period of growth, or to put it in terms of life-cycle analysis, as the set-up phase and take-off phase of a very long-term transsecular life-cycle, being part perhaps of even longer life-cycles, and certainly made up itself of a variety of less long life-cycles of different duration (Marchetti 1983, Nakicenovic/Grübler 1991, Modis 1992). Economists are quite familiar with the interference of short-term and longer-term business cycles, and with the life-cycles or learning curves of technologies, products, markets, and other social entities. It is remarkable, to what extent life-cycle analysis, i.e. the analysis of learning and diffusion curves or innovation paths, has actually become a shared paradigm of many disciplines, from geology, biology and ecology, via engineering, organisation research and economics, to sociology, psychology and other disciplines.

Life-cycle analysis of secular trends in modern civilization reveals that hitherto we have had a situation of ongoing growth. Any breakdown of cultural and societal growth processes proved to be crises of restructuration which paved the way for ever stronger growth processes. In such a context it did not matter how money was phased into circulation as long as the money base kept growing in accordance with the monetary requirements of real-economic growth. The practical problem always used to be relative shortage of precious metals and thus unwanted scarcity of the money base. Hence the historical monetary policies of bullionism from the 14th to the 18th century, or of mercantilism from the 16th to the 18th century. Presumably, the Spanish, Portuguese or English crown pursued colonisation mainly because they were so desperately looking for gold and silver. John Law had his go with national central bank notes in the beginning of the 18th century because he was finally believed to have developed a device that could help fostering growth and employment while eliminating the all suffocating royal debt of Louis XIV's government.

Today, one can put forward the same type of argument in an analogous way in favour of debt-free plain money too. The difference today, however, is growing evidence of the transsecular life-cycle possibly having reached and even passed its inflection point or turning point. Curve-fitting over historical data e.g. of world population growth, discoveries, inventions, diffusion of knowledge and technology, levels of productivity, energy and materials intensity, and similar, indicate a trend towards decreasing long-term growth rates. If this is true, civilization is entering the second half of its life-cycle characterized by slowly but surely shrinking growth rates, less intensive dynamics of structural change, etc. This is a phase of change-over to a retentive stage, or to a final phasing-out and replacement by an emerging and superior competitor system.

As a consequence, the need for an ever growing money base will sooner or later become obsolete. If one continued to feed a growing money base into an economy

no longer growing, the result would unavoidably be inflation. According to a rough estimate of mine, funding e.g. a basic income by central bank drawing rights, in a volume like today but under hypothetical conditions of zero growth, could cause an inflation rate of about 7 per cent. That is much too high to be acceptable, and it is clearly above the 3 per cent grease-rate of inflation considered by James Tobin as being even beneficial to economic growth and general wealth. This, of course, represents a highly controversial bit of Keynesianism not approved of by everybody. I am convinced, however, that zero inflation is an unscholarly monetary target. Because, in the same way as there is a natural rate of unemployment or non-accelerating inflation rate of unemployment (NAIRU) variable over time, there is also a natural rate or non-accelerating unemployment rate of inflation (NAURI), due to incessant business-cycle fluctuations and structural change of any kind which create longer-lasting mismatch of supply and demand.

The inflation or growth problem in connection with a non-redeemable money base should be put into an appropriate time frame. Even if the life-cycle of modern civilization has reached its inflection or turning point, this does not mean there would suddenly be no more growth or structural change. In systemic evolution there is no sudden change of fundamental speed and volume, at least not immanently, notwithstanding impacts from the outside. In further following the path-dependent course and momentum of the transsecular life-cycle one is very probably on the safe side in assuming that overall economic growth will continue for another 100 – 200 years before it finally approaches a retentive stage of the life-cycle. So, seen from a pragmatic point of view there is no doubt that a continually increased money base would be feasible for decades or even one or two centuries to come. Without wanting to repeat Keynes' recklessness of "In the long run we are all dead", it may be permitted to ask why we should rack our brains about problems in a very distant future which we cannot anticipate anyway?

Ecologists and green-minded people may feel irritated by a 200-year-perspective of ongoing growth. Although the ecological problems of industrial growth cannot be discussed here, it should be said that *economic* growth, i.e. growth of *monetary* units such as turn over, income, money, or capital, is different from *industrial* growth, or growth of production and consumption in *physical* terms. Of relevance to the ecology is exclusively the physical side of industrial growth, the industrial metabolism. Money as such has no ecological meaning. However, it is obvious that economic growth in the past and present has been linked to an environmentally damaging type of industrial growth, with e.g. energy and materials coefficients well above 1 (i.e. 1 unit of monetary growth involved an industrial growth of >1).

Things must not necessarily continue as they were. In industrially advanced countries energy and materials coefficients have come down by now to under 1 and continue their move downwards. Changing the quantities or efficiency and, much more importantly, the physical and biochemical *quality or effectiveness* of the industrial metabolism has been recognized as an absolute necessity from the local to the global level. E.g., it makes a decisive ecological difference whether an

energy coefficient of 0.85 relates to a fossil, nuclear or hydrosolar energy base. Incremental improvements and, more importantly, technological system changes (basic innovations) have to be set on their path, and this task needs to be given still more attention and higher priority than it has so far gained. In principle, there are sustainable technological and institutional answers to the ecological question. Ongoing growth does not automatically involve a doomsday scenario. On the contrary, if the ongoing modernization of industrial society includes an ecological modernization too, then ongoing monetary growth with an according restructuring of the capital base and with considerably raised levels of purchasing power for the entire world population will be indispensable.

As to the inflation side of the growth problem, in addition to the pragmatic answer a clear answer according to theory can be given too. As the creation of fresh money has to keep within the limits of a potential-oriented money supply, the creation of fresh money has to be reduced to the degree that the average overall economic growth rate decreases. From a monetary and technical point of view, this does not constitute any problem since tax-levied government money and central bank issued fresh money can be combined to any proportion required.

Practically there might still arise economic and political problems quite similar to those we know from the economic past and present. People and politicians, businessmen and bankers will continue to behave less reasonably than utilitarian economic theory would require us to. So our successors will almost certainly continue to experience crises and break-downs, eras of higher or lower inflation, or, even nastier, perhaps a revival of the medieval practice of recalling money. This was the practice of cutting the money reserves of individuals by compulsarily exchanging old good coins for new bad coins of the same denomination. The modern equivalent of this are compulsory general cuts of money and capital stocks, usually called currency reform. I am certainly not promoting these tools of monetary torture. I simply want to establish some empirical evidence. After things have been on the wrong track for a while, and the time comes to readjust claims and liabilities, to readapt giving and taking in society, things are usually settled in none too orderly ways. Collapse of fortunes, valuation adjustments, write-offs, stock-cutting, and similar events will probably always be part of economic life under *any* monetary system.

What about ethics of money?

Monetarists worried about whether "money matters" or whether "money doesn't matter". This controversy concerned the transmission of monetary factors into the real economy, especially the question of "too much money at once". This is a relevant discussion with regard to the special case of money supply shocks. It is however a strange debate with regard to the general reality of money as an effective instrument of control. What really matters, it could be said, are the purposes money is created and used for, and the different actors who have different degrees of control over this.

You may have noticed that the impetus behind plain money is not an ethical one in the sense of "monetary correctness" so to speak. Of course, since the way we acquire and spend money pertains to our share of economic control, the case e.g. for "ethical" and "green" spending is obvious, even if politically "correct" conversations tend to be joyless. The inspiration of plain money is not linked to a "social" intention in the sense of traditional welfare policy which claims to help the poor and weak, and to improve the lot of the nation as a whole. Plain money, certainly, could be used for purposes relating to welfare policy. As explained above, I am in favour of funding a basic income scheme with the annual increase of the money base as far as such a scheme is embedded in a context of distributive reversion. Some sort of basic income guarantee is part of any civilized society's constitution. Apart from that, however, the reasons for introducing plain money are of a purely functional and evolutive nature.

In an essay on money James Buchan (1997) says, words and money are among humankind's greatest inventions. While we may enjoy words - communication, thinking, literature, science - we do not confuse words and life. Similarly, we may enjoy money, but we should remain conscious of the fact that the instrument is not an end in itself. Money is a just a tool, an instrument of economic and societal control through repartition of resources. Money is not a sensible purpose in itself. Such an instrument needs to be seen and to be handled in a neutral way. This may appear to be a "cold" or "technocratic" stance – something it is not.

The plain money proposal is in line with an old liberal rationale which says that the best welfare policy is to prevent a welfare policy from becoming necessary in the first place by persuing a sound monetary, fiscal and economic policy. A well-constituted and well-run open market economy prevents extensive welfare interventions from becoming necessary. I think this is true. Up to a point, radical left-wing criticism of the welfare state was right in saying that capitalism and welfare are twin phenomena. The critics simply failed to see that under communist conditions of state monopoly this was true in a disturbing way too.

The counter-model to this continues to be optimum decentralization, strong lean government serving civil rights and liberties, freedom of choice, autonomy of action, balance of interest groups and powers of any kind, etc. In such a context, a free and equitable market economy is just the opposite of capitalism. Capitalism is about maximum concentration of financial power, about controlling the creation *and* the use of money, about dominating financial and economic repartition, and, ensuing from this, about amassing money at the cost of others.

Capitalist markets are anything but free and equitable. They are stamped by so-called asymmetries – of information and knowledge, of political and legal power, of technical power, and, above all, of concentrated financial power as well as concentrated supply-power and demand-power. The confusion of the market economy with capitalism, in other words, the identification of any market economy with the special shape of capitalistic market economies, is among the flaws of (neo)classical economics. The liberalism of this stance has been considerably per-

verted into an idyllic ideology which hides the concentration of power around very large "individual" "private" corporate bureaucracies.

In the long run, the strict interest-freeness and functional neutrality of plain money will possibly have an osmotic cultural impact. Debt-free plain money can contribute to an advanced understanding of the role of money in society, an understanding which would undermine the spirit of materialism, utilitarianism and capitalism. Money would slowly but surely cease to be an end in itself, thus clearing the horizon for more substantial priorities to come to the fore.

Literature

- Armstrong*, Alan D. 1996: To Restrain the Red Horse. The urgent need for radical economic reform, Dunoon: Towerhouse Publ.
- Barber*, William J. 1997: Editorial Introduction with Selected Documents to: Fisher 1935.
- BIEN* 1996: The Basic Income European Network, <http://www.espo.ucl.ac.be/ETES/BIEN/bien.htm>.
- Bird*, Edward J. 1996: Repairing the Safety Net. Is the EITC the Right Patch?, *Journal of Policy Analysis and Management*, Vol. 15, No. 1, 1996, 1 - 31.
- Bofinger*, Peter 1985: Währungswettbewerb. Eine systematische Darstellung und kritische Würdigung von F. A. Hayeks Plänen zu einer grundlegenden Neugestaltung unserer Währungsordnung, Köln: Carl Heymanns.
- Browning*, Edgar K. 1995: Effects of the Earned Income Tax Credit on Income and Welfare, *National Tax Journal*, Vol. XLVIII, No. 1, March 1995, 23 - 43.
- Buchan*, James 1997: Frozen Desire. An Inquiry into the Meaning of Money, London: Picador.
- Cohrssen*, Hans R.L. 1989: The Stamp Scrip Movement in the U.S.A., in: Suhr 1989, 113 - 122.
- Currie*, Lauchlin 1934: The Supply and Control of Money in the United States, Cambridge, Mass.: Harvard University Press.
- Dahrendorf*, Ralf 1983: Die Chancen der Krise. Über die Zukunft des Liberalismus, Stuttgart.
- Dohnanyi*, Klaus von (Hg) 1986: Notenbankkredit an den Staat? Beiträge und Stellungnahmen zu dem Vorschlag, öffentliche Investitionen mit zins- und tilgungsfreien Notenbankkrediten zu finanzieren, Baden-Baden: Nomos.
- Engels*, Wolfram 1996: Der Kapitalismus und seine Krisen. Eine Abhandlung über Papiergeld und das Elend der Finanzmärkte, Stuttgart: Wirtschaftswoche/Schäffer-Poeschel.
- Engels*, Wolfram / *Mitschke*, Joachim / *Starkloff*, Bernd 1973: Staatsbürgersteuer, Wiesbaden: Gabler.
- Feldstein*, Martin 1974: Unemployment Compensation: Adverse Incentives and Distributional Anomalies, *National Tax Journal*, Vol. XXVII, 1974, No. 2, 231 - 244.
- 1979: Social Security and Private Saving, *Social Security Bulletin of the US Dep. of Health and Human Services*, Social Security Administration, Washington D.C., May 1979, Vol. 42, No. 5, 36 - 39.
- 1987: The Welfare Cost of Social Security's Impact on Private Saving, in: Boskin, Michael M. (Ed) 1987: Modern Developments in Public Finance. Essays in Honor of Arnold Harberger, Oxford: Basil Blackwell.
- Filc*, Wolfgang 1989: Finanzierung öffentlicher Aufgaben durch zinslosen Notenbankkredit, *WSI Mitteilungen*, 42. Jg., Juli 1989, 405 - 412.
- Fisher*, Irving 1935: 100% Money, Works Vol. 11, ed. and introduced by William J. Barber, London: Pickering & Chatto, 1997.
- Fisher*, Irving / *Cohrssen*, Hans R.L. 1934: Stable Money. A History of the Movement, New York: Adelphi Company.
- Friedman*, Milton 1948: A Monetary and Fiscal Framework for Economic Stability, *The American Economic Review*, 38 (1948) 245 - 264, reprinted in: Friedrich A. Lutz/Lloyd W. Mints (Eds) 1951: Readings in Monetary Theory, Homewood, Ill. (Richard D. Irwin), 369 - 393; reprinted again in: M Friedman (Ed) 1953, Essays in Positive Economics, The University of Chicago Press, 133 - 156.
- 1959: A Program for Monetary Stability, New York: Fordham University Press.
- 1962: Capitalism and Freedom, The University of Chicago Press.
- 1969a: The Optimum Quantity of Money, in: Ders., The Optimum Quantity of Money and other Essays, New York: Aldine de Gruyter, 1969, 1 - 68.
- 1969b: The Monetary Theory and Policy of Henry Simons, in: Ders., The Optimum Quantity of Money and other Essays, New York: Aldine de Gruyter, 1969, 81 - 94.

- 1991: *Monetarist Economics*, Oxford, UK/Cambridge, Mass.: Basil Blackwell.
- 1992: *Money Mischief*, New York: Harcourt Brace Jovanovich.
- Friedman, Milton / Friedman, Rose* 1980: *Free to Choose*, San Diego/New York/ London: Harcourt Brace Jovanovich.
- Gesell, Silvio* 1919: *Die natürliche Wirtschaftsordnung durch Freiland und Freigeld*, Arnstadt/Thüringen: Verlag Roman Gesell.
- Gocht, Rolf* 1975: *Kritische Betrachtungen zur nationalen und internationalen Geldordnung*, Berlin: Duncker & Humblot.
- Gödde, Roland* 1985: Der Chicago-Plan, *WISU*, 14. Jg., Heft 11, November 1985, 525 - 527.
- Greffe, Xavier* 1978: *L'impôt des pauvres*, Paris: Éditions du Seuil.
- Hayek, Friedrich A. von* 1971: *The Constitution of Liberty*, Chicago: The University of Chicago Press and London: Routledge & Kegan Paul.
- 1977: *Entnationalisierung des Geldes. Eine Analyse der Theorie und Praxis konkurrierender Umlaufmittel*, Tübingen: J.C.B. Mohr/Paul Siebeck; engl. preliminary version 1976: *Denationalisation of Money. An analysis of the Theory and Practice of Concurrent Currencies*, London: Institute of Economic Affairs.
- Hart, Albert G.* 1935: *The Chicago Plan of Banking Reform*, *The Review of Economic Studies*, 2 (1935) 104 - 116, reprinted in: Friedrich A. Lutz/Lloyd W. Mints (Eds) 1951: *Readings in Monetary Theory*, Homewood, Ill.: Richard D. Irwin, 437 - 456.
- Hauser, Richard / Hübinger, Werner* 1993: *Arme unter uns. Ergebnisse und Konsequenzen der Caritas-Armutuntersuchung*, hg. v. Deutschen Caritasverband, Freiburg.
- Heinsohn, Gunnar / Steiger, Otto* 1996: *Eigentum, Zins und Geld. Ungelöste Rätsel der Wirtschaftswissenschaft*, Berlin: Rowohlt.
- Hixson, William F.* 1991: *A Matter of Interest. Reexamining Money, Debt, and Real Economic Growth*, Westport, Conn./London: Praeger
- 1993: *Triumph of the Bankers. Money and Banking in the Eighteenth and Nineteenth Centuries*, Westport, Conn./London: Praeger
- Holtzblatt, Janet / McCubbin, Janet / Gillette, Robert* 1994: Promoting Work through the EITC, *National Tax Journal*, May 1994, 591 - 607.
- Horsmann, George* 1988: *Inflation in the Twentieth Century. Evidence from Europe and North America*, New York: St.Martin's Press/Harvester Wheatsheaf.
- Huber, Joseph* 1998: *Vollgeld. Beschäftigung, Grundeinkommen und weniger Staatsquote durch eine modernisierte Geldordnung*, Berlin: Duncker & Humblot.
- Hübinger, Werner* 1996: *Prekärer Wohlstand. Neue Befunde zu Armut und sozialer Ungleichheit*, Freiburg: Lambertus.
- Hutchinson, Frances / Burkitt, Brian* 1997: *The Political Economy of Social Credit and Guild Socialism*, London/New York: Routledge
- Keynes, John Maynard*, 1930: *A Treatise on Money*, London: Macmillan.
- 1936: *The General Theory of Employment, Interest and Money*, London: Macmillan.
- Klanberg, Frank / Prinz, Aloys (Hg)* 1988: *Perspektiven sozialer Mindestsicherung*, Berlin: Duncker & Humblot.
- Knapp, Georg Friedrich* 1905: *Staatliche Theorie des Geldes*, Leipzig: Duncker & Humblot.
- Kronberger Kreis* 1986: *Bürgersteuer. Entwurf einer Neuordnung von direkten Steuern und Sozialleistungen*, Frankfurter Institut für wirtschaftspolitische Forschung, Schriftenreihe Bd. 11, April 1986 (authors are W. Engels, A. Gutowski, W. Hamm, W. Möschel, W. Stützel, C.Chr. v. Weizsäcker, H. Willgerodt).
- Kosters, Marvin H.* 1993: *The Earned Income Tax Credit and the Working Poor*, *American Enterprise*, 4 (B), May - June 1993, 64 - 72.
- Mairet, Philip* 1934: *The Douglas Manual*, London: Stanley Nott.
- Marchetti, Cesare* 1983: *Innovation, Industry and Economy*, International Institute of Applied Systems Analysis, Laxenburg n.Vienna, IIASA-Paper PP-83-6.
- Mises, Ludwig von* 1928: *Geldwertstabilisierung und Konjunkturpolitik*, Jena: G. Fischer.

- Modis*, Theodore 1992: Predictions, New York: Simon & Schuster.
- Munson*, Gorham 1945: Aladdin's Lamp. The Wealth of the American People, New York: Creative Age Press.
- Nakicenovic*, Nebojsa / *Grübler*, Arnulf (Eds) 1991: Diffusion of Technologies and Social Behavior, Berlin: Springer.
- O'Brian*, D. P. 1994: Foundations of Monetary Economics, Vol. IV - The Currency School, Vol. V - The Banking School, London: William Pickering.
- Paarlberg*, Don 1993: An Analysis and History of Inflation, London/Westport, Conn.: Praeger.
- Pahlke*, Jürgen 1970: Steuerbedarf und Geldpolitik in der wachsenden Wirtschaft. Geldschöpfung als Mittel der Staatsfinanzierung, Berlin: Walter de Gruyter.
- Rhys-Williams*, Lady Juliet E. 1953: Taxation and Incentive, London/Edinburgh/Glasgow: William Hodge & Co.
- Robertson*, James 1985: Future Work, Aldershot: Gower/Maurice Temple Smith.
- 1990: Future Wealth. A New Economics for the 21st Century, London/New York: Cassell.
- Scholz*, John Karl 1994: The Earned Income Tax Credit. Participation, Compliance, and Antipoverty Effectiveness, *National Tax Journal*, Vol. XLVII, No. 1, March 1994, 63 - 87.
- 1996: In-Work Benefits in the United States. The Earned Income Tax Credit, *The Economic Journal*, 106 (January 1996) 156 - 169.
- Schwarz*, Fritz 1951: Das Experiment von Wörgl, Bern: Genossenschaft Verlag Freiwirtschaftlicher Schriften.
- Simons*, Henry C. 1948: A Positive Programme for Laissez Faire. Some Proposals for a Liberal Economic Policy, and: Rules versus Authorities in Monetary Policy. Both articles in: H.C. Simons, Economic Policy for a Free Society, The University of Chicago Press, 1948. First published as "Rules...", *The Journal of Political Economy*, 44 (1936) 1 - 30. Reprinted in: Lutz, Friedrich A. / Mints, Lloyd W. (Eds) 1951: Readings in Monetary Theory, Homewood, Ill.: Richard D. Irwin, 337 - 368.
- Suhr*, Dieter 1989: The Capitalistic Cost-Benefit Structure of Money, Berlin/Heidelberg: Springer.
- Tobin*, James / *Pechman*, Joseph A. / *Mieszkowski*, Peter M. 1967: Is a Negative Income Tax Practical?, *The Yale Law Journal*, New Haven, Vol. 77, No. 1, November 1967, 1 - 27.
- Townsend*, Peter 1993: The International Analysis of Poverty, New York.
- Van der Veen*, R.J. / *van Parijs*, Philippe 1986: A capitalist road to communism, *Theory and Society* (1986) 15.
- Vaubel*, Roland 1978a: Strategies for Currency Unification. The Economics of Currency Competition and the Case for a European Parallel Currency, Tübingen: Mohr/ Siebeck.
- 1978b: Free Currency Competition, *Weltwirtschaftliches Archiv*, 113. Jg., 1978, 435 - 461.
- 1985: Competing Currencies. The Case for Free Entry, *Zeitschrift für Wirtschafts- und Sozialwissenschaften*, 105. Jg., Heft 5, 547 - 564.
- White*, Lawrence H. 1989: Competition and Currency. Essays on Free Banking and Money, New York University Press.